



## October 2021 Council Meeting Webinar

Tuesday, October 5 – Wednesday, October 6, 2021

*Meeting by Webinar*

<https://mafmc.org/briefing/october-2021>

### Agenda

#### Tuesday, October 5<sup>th</sup>

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- 9:00 a.m. – 9:30 a.m.      Executive Committee (*Closed Session*)**
- Recommend Spiny Dogfish Advisory Panel Vacancy Appointments
- 9:30 a.m. – 12:00 p.m.      Executive Committee – 2022 Implementation Plan (*Open Session*) (Tab 1)**
- Review progress on 2021 Implementation Plan
  - Review staff recommendations for 2022 actions and deliverables
  - Public comment opportunity
  - Approve draft actions and deliverables for further development in 2022 Implementation Plan
- Lunch 12:00 p.m. – 1:00 p.m. -----
- 1:00 p.m.                      Council Convenes**
- 1:00 p.m. – 2:00 p.m.      HMS Diet Study Report (Tab 2)**
- Walt Golet, University of Maine / Gulf of Maine Research Institute
- 2:00 p.m. – 3:00 p.m.      Chub Mackerel Specifications (Tab 3)**
- Review recommendations from the Advisory Panel, SSC, and Monitoring Committee
  - Review previously set 2022 chub mackerel specifications and recommend any changes if necessary
- 3:00 p.m. – 4:00 p.m.      Atlantic Mackerel Rebuilding (Tab 4)**
- Review SSC's September 2021 meeting results regarding rebuilding
  - Provide additional guidance regarding rebuilding plan modifications, if appropriate

## Wednesday, October 6<sup>th</sup>

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### 9:00 a.m. – 11:00 a.m. **Spiny Dogfish Specifications (Tab 5)**

- Review SSC, Advisory Panel, Monitoring Committee, staff, and Committee recommendations for 2022 fishing year specifications
- Review staff trip limit analysis
- Review previously implemented 2022 specifications (including trip limit) and recommend changes if necessary

### 11:00 a.m. – 12:00 p.m. **Private Tilefish Reporting (Tab 6)**

- Report from GARFO on Tilefish permitting and reporting numbers

----- Lunch 12:00 p.m. – 1:00 p.m. -----

### 1:00 p.m. – 2:00 p.m. **North Atlantic Right Whales (Tab 7)**

(Colleen Coogan, Marisa Trego; Greater Atlantic Regional Fisheries Office, Protected Resources Division)

- Atlantic Large Whale Take Reduction Team scoping for risk reduction measures for Atlantic trap/pot and gillnet fisheries

### 2:00 p.m. – 2:30 p.m. **Overview of June 2021 Scallop FMP Biological Opinion** (Bill Barnhill; Greater Atlantic Regional Fisheries Office, Protected Resources Division)

- New Incidental Take Statement, RPMs and Terms and Conditions, and Sea Turtle Monitoring Plan

### 2:30 p.m. – 5:00 p.m. **Business Session**

**Committee Reports (Tab 8)** – SSC, Executive Committee

**Executive Director's Report (Tab 9)** (Dr. Chris Moore)

**Organization Reports** – NMFS Greater Atlantic Regional Office, NMFS Northeast Fisheries Science Center, NOAA Office of General Counsel, NOAA Office of Law Enforcement, US Coast Guard

**Liaison Reports (Tab 10)** – New England Council, South Atlantic Council










**Other Business and General Public Comment**







*This meeting will be recorded. Consistent with 16 USC 1852, a copy of the recording is available upon request.*

The above agenda items may not be taken in the order in which they appear and are subject to change, as necessary. Other items may be added, but the Council cannot take action on such items even if the item requires emergency action without additional public notice. Non-emergency matters not contained in this agenda may come before the Council and / or its Committees for discussion, but these matters may not be the subject of formal Council or Committee action during this meeting. Council and Committee actions will be restricted to the issues specifically listed in this agenda. Any issues requiring emergency action under section 305(c) of the Magnuson-Stevens Act that arise after publication of the Federal Register Notice for this meeting may be acted upon provided that the public has been notified of the Council's intent to take final action to address the emergency. The meeting may be closed to discuss employment or other internal administrative matters.

## Stock Status of MAFMC-Managed Species

(as of 9/21/21)

SPECIES	STATUS DETERMINATION CRITERIA		Stock Status	Most Recent Assessment
	Overfishing $F_{\text{threshold}}$	Overfished $\frac{1}{2} B_{\text{MSY}}$		
 <b>Summer Flounder</b>	$F_{35\%MSP}=0.422$	60.87 million lbs	No overfishing Not overfished	Most recent management track assessment was 2021.
 <b>Scup</b>	$F_{40\%MSP}=0.200$	99.23 million lbs	No overfishing Not overfished	Most recent management track assessment was 2021.
 <b>Black Sea Bass</b>	$F_{40\%MSP}=0.46$	15.92 million lbs	No overfishing Not overfished	Most recent management track assessment was 2021.
 <b>Bluefish</b>	$F_{35\%SPR}=0.183$	219.05 million lbs	No overfishing Overfished	Most recent management track assessment was 2021.
 <b>Illex Squid (short finned)</b>	Unknown	Unknown	Unknown Unknown	Most recent benchmark assessment was 2006; not able to determine current exploitation rates or stock biomass.
 <b>Longfin Squid</b>	Unknown	46.7 million lbs	Unknown Not overfished	Most recent assessment was 2020; not able to determine current exploitation rates.
 <b>Atlantic Mackerel</b>	$F_{40\%}=0.22$	199.6 million pounds	Overfishing Overfished	Most recent management track assessment was 2021.
 <b>Butterfish</b>	$F_{\text{Proxy}}=2/3M=0.81$	50.3 million lbs	No overfishing Not overfished	Most recent assessment was 2020.
 <b>Chub Mackerel</b>	At least 3,026 MT of catch per year	At least 3,026 MT of catch three years in a row	No overfishing Not overfished	No stock assessment.

SPECIES	STATUS DETERMINATION CRITERIA		Stock Status	Most Recent Assessment
	Overfishing $F_{\text{threshold}}$	Overfished $\frac{1}{2} B_{\text{MSY}}$		
<b>Surfclam</b> 	$F/F_{\text{threshold}} = 1^a$	$SSB/SSB_{\text{threshold}} = 1^b$	No overfishing Not overfished	Most recent assessment was 2020
<b>Ocean Quahog</b> 	$F/F_{\text{threshold}} = 1^c$	$SSB/SSB_{\text{threshold}} = 1^d$	No overfishing Not overfished	Most recent assessment was 2020.
<b>Golden Tilefish</b> 	$F_{40\%MSP} = 0.261$	12.12 million lbs	No overfishing Not overfished	Most recent management track assessment was 2021.
<b>Blueline Tilefish</b> 	Unknown	Unknown	South of Cape Hatteras: No overfishing Not overfished  North of Cape Hatteras: Unknown Unknown	Most recent benchmark assessment was 2017.
<b>Spiny Dogfish</b> (Joint mgmt with NEFMC) 	$F_{\text{MSY}} = 0.2439$	175.6 million lbs Female SSB	No overfishing Not overfished	Most recent assessment update was 2018.
<b>Monkfish</b> (Joint mgmt with NEFMC) 	NFMA & SFMA $F_{\text{MAX}} = 0.2$	NFMA - 1.25 kg/tow  SFMA - 0.93 kg/tow (autumn trawl survey)	Unknown Unknown	Recent benchmark failed peer review and invalidated previous 2010 benchmark assessment results. Operational assessment in 2019 used survey data to scale earlier ABC.

SOURCES: Office of Sustainable Fisheries - Status Report of U.S. Fisheries; SAW/SARC, SEDAR, and TRAC Assessment Reports.

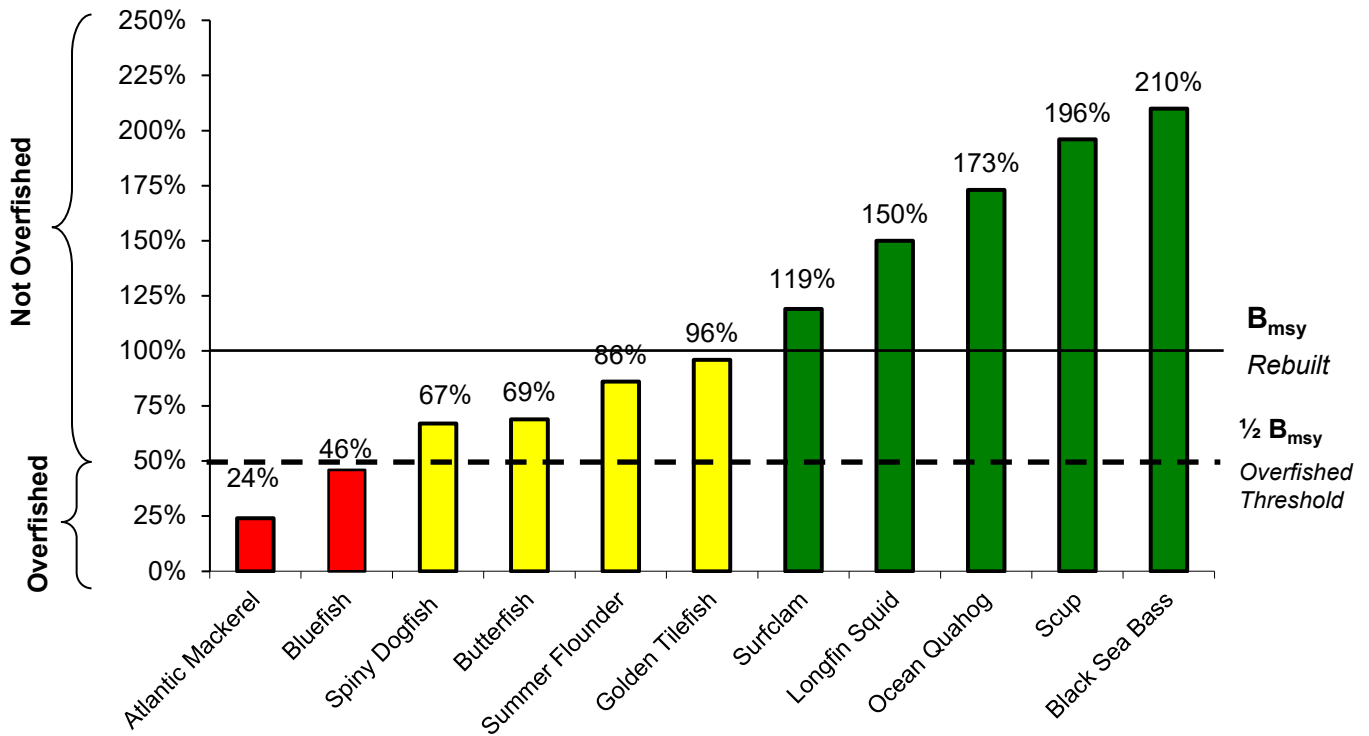
<sup>a</sup>  $F_{\text{threshold}}$  is calculated as 4.136 times the mean F during 1982 – 2015.

<sup>b</sup>  $SSB_{\text{threshold}}$  is calculated as  $SSB_0/4$ .

<sup>c</sup>  $F_{\text{threshold}}$  is 0.019.

<sup>d</sup>  $SSB_{\text{threshold}}$  is calculated as  $0.4 * SSB_0$ .

## Stock Size Relative to Biological Reference Points (as of 9/21/21)



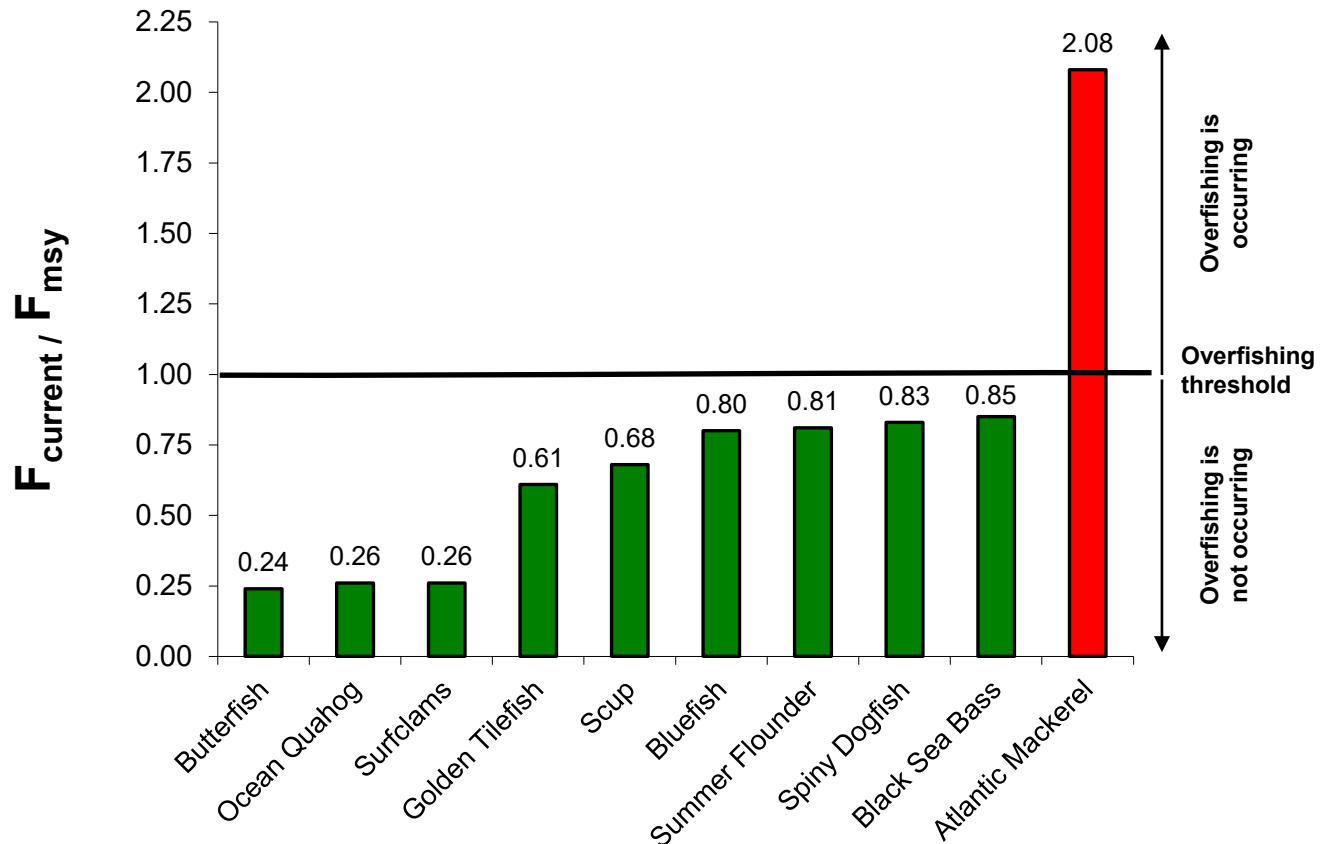
### Notes:

- Unknown  $B_{msy}$  - *Illex* squid, monkfish (NFMA & SFMA), blueline tilefish (North of Cape Hatteras), and chub mackerel.
- Of the 15 species managed by the Council, 5 are above  $B_{msy}$ , 6 are below  $B_{msy}$ , and 4 are unknown.

Year of data used to determine stock size	
Atlantic Mackerel	2019
Black Sea Bass	2019
Bluefish	2018
Butterfish	2019
Golden Tilefish	2020
Longfin Squid	2018-2019 (average)
Ocean Quahog	2019
Spiny Dogfish	2018
Surfclam	2019
Scup	2019
Summer Flounder	2019

## Fishing Mortality Ratios for MAFMC-Managed Species

(as of 9/21/21)



### Notes:

- Unknown fishing mortality: *Illex* squid, Longfin squid, monkfish (NFMA and SFMA), blueline tilefish (North of Cape Hatteras), and chub mackerel.
- Of the 15 species managed by the Council, 9 are above F<sub>msy</sub>, 1 is above, and 5 are unknown.

Year of data used to determine fishing mortality	
Atlantic Mackerel	2019
Black Sea Bass	2019
Bluefish	2018
Butterfish	2019
Golden Tilefish	2020
Ocean Quahog	2019
Spiny Dogfish	2017
Surfclam	2019
Scup	2019
Summer Flounder	2019



# Status of Council Actions Under Development

AS OF 9/21/21

FMP	Action	Description	Status	Staff Lead
Summer Flounder, Scup, Black Sea Bass	Commercial/Recreational Allocation Amendment	<p>This joint MAFMC/ASMFC amendment will reevaluate and potentially revise the commercial and recreational sector allocations for summer flounder, scup, and black sea bass. This action was initiated in part to address the allocation-related impacts of the revised recreational data from MRIP.</p> <p><a href="http://www.mafmc.org/actions/sfsbsb-allocation-amendment">http://www.mafmc.org/actions/sfsbsb-allocation-amendment</a></p>	The Council and Board reviewed public comments at the April 2021 Council Meeting and voted to postpone final action until December 2021. In August 2021, the Council and Board added additional allocation alternatives which are within the range of the previously approved alternatives.	Dancy/Coutre/Beaty
Summer Flounder, Scup, Black Sea Bass and Bluefish	Recreational Reform Framework and Technical Guidance Documents	<p>The Council and Policy Board initiated a framework/addendum to address the following topics for summer flounder, scup, black sea bass, and bluefish: (1) better incorporating MRIP uncertainty into the management process; (2) guidelines for maintaining status quo recreational management measures (i.e., bag, size, and season limits) from one year to the next; (3) a process for setting multi-year recreational management measures; (4) changes to the timing of the recommendation for federal waters recreational management measures; and (5) a proposal put forward by six recreational organizations called a harvest control rule. The Council and Policy Board agreed to prioritize the harvest control rule over the other topics.</p> <p><a href="https://www.mafmc.org/actions/recreational-reform-initiative">https://www.mafmc.org/actions/recreational-reform-initiative</a></p>	The Council and Policy Board received an update on an initial range of alternatives for a harvest control rule framework/addendum at the August 2021 meeting. They will receive an additional update during their October 21, 2021 meeting.	Beaty
	Recreational Sector Separation and Catch Accounting Amendment	<p>This joint MAFMC/ASMFC amendment considers (1) options for managing for-hire recreational fisheries separately from other recreational fishing modes and (2) options related to recreational catch accounting, such as private angler reporting and enhanced vessel trip report requirements for for-hire vessels.</p> <p><a href="https://www.mafmc.org/actions/recreational-reform-initiative">https://www.mafmc.org/actions/recreational-reform-initiative</a></p>	The Council and Policy Board initiated this action at the joint October 2020 meeting. No progress is expected in 2021 due to other priorities.	Beaty

<b>FMP</b>	<b>Action</b>	<b>Description</b>	<b>Status</b>	<b>Staff Lead</b>
Surfclam and Ocean Quahog	Addressing Current Surfclam and Ocean Quahog Species Separation Requirements	As surfclams have shifted toward deeper water in recent years, catches including both surfclams and ocean quahogs have become more common. Current regulations do not allow surfclams and ocean quahogs to be landed on the same trip. The Council is exploring options to address this issue.	The Council will review a white paper and discuss next steps in December	Coakley/ Montañez
Mackerel, Squid, Butterfish	Mackerel Rebuilding Framework 2.0	This action will re-set Atlantic mackerel rebuilding and consider related management measures, including the river herring and shad cap.	In Development, staff looking for additional guidance at the October 2021 meeting. Final action anticipated in April 2022 for January 2023 implementation.	Didden
Omnibus	Omnibus Amendment for Data Modernization	This amendment will address the regulatory changes needed to fully implement the Agency's Fishery-Dependent Data Initiative.	The Council last received an update at the October 2018 meeting.	GARFO/NEFSC





## Timeline and Status of Current and Upcoming Specifications for MAFMC Fisheries

As of 9/21/21

Current Specifications	Year(s)	Council Approval	Initial Submission	Final Submission	Proposed Rule	Final Rule	Regs Effective	Notes
Golden Tilefish	2021-2022	4/8/20	5/11/20	7/21/20	11/13/20	12/21/20	12/21/20	
Blueline Tilefish	2019-2021	4/11/18	8/17/18	10/24/18	11/19/18	2/12/19	2/12/19	
Surfclam and Ocean Quahog	2021-2026	8/12/20	9/2/20	2/24/21	2/17/21	5/13/21	6/14/21	
Longfin Squid	2021-2023	8/10/20	10/14/20	7/2/21	5/26/21	7/22/21	7/22/21	
Butterfish	2021-2022	8/10/20	10/14/20	7/2/21	5/26/21	7/22/21	7/22/21	
Illex Squid	2020-2021	6/17/20	10/14/20	7/2/21	5/26/21	7/22/21	7/22/21	Also used for in-season adjustment to Illex from June 2021 Council meeting.
Atlantic Mackerel (including RH/S cap)	2021-2022	8/10/20	10/14/20	7/2/21	5/26/21	7/22/21	7/22/21	
Chub mackerel	2020-2022	3/7/19	5/31/19	10/25/19	3/9/20	8/4/20	9/3/20	Reviewed October 2020. No changes recommended.
Bluefish	2021 (revised)	8/11/20	9/24/20	10/26/20	11/5/20	12/16/20	12/16/20	
Summer Flounder, Scup, Black Sea Bass	2022-2023	8/9/21						
Spiny Dogfish	2021-2022	10/6/20	12/7/20	2/3/21	3/4/21	5/1/21	5/1/21	

### Recreational Management Measures

Current Management Measures	Year(s)	Council Approval	Initial Submission	Final Submission	Proposed Rule	Final Rule	Regs Effective	Notes
Summer flounder recreational measures	2021	12/15/20	1/20/21	1/20/21	4/6/21	5/6/21	5/5/21	Rulemaking required each year to continue use of conservation equivalency
Black sea bass recreational measures	2021	2/14/18	3/5/18	4/10/18	4/11/18	5/31/18	5/31/18	Reviewed in 2020. No changes from previous year's measures.
Scup recreational measures	2021	12/10/14	3/20/15		5/5/15	6/19/15	6/19/15	Reviewed in 2020. No changes from previous year's measures.
Bluefish recreational measures	2021	12/10/19	1/23/20	3/19/20	5/25/20	6/29/20	6/29/20	Reviewed in 2020. No changes from previous year's measures.



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

**MEMORANDUM**

**Date:** September 24, 2021  
**To:** Executive Committee  
**From:** Chris Moore, Executive Director  
**Subject:** 2022 Implementation Plan – Initial Discussion

The Executive Committee will meet on Tuesday, October 5 to receive an update on the 2021 Implementation Plan and discuss proposed actions and deliverables for 2022. The Council will review and approve a complete 2022 Implementation Plan in December. The following items are enclosed for Committee review:

1. 2021 Proposed Actions and Deliverables – End-of-Year Updates
2. Draft 2022 Proposed Actions and Deliverables

# 2021 Actions and Deliverables

## End-of-Year Updates

The table below provides an update on the status of proposed actions and deliverables from the Council’s 2021 Implementation Plan. This document reflects the expected status of each item by the end of 2021 (tasks may be marked as “Completed” if they will be addressed at the October or December meetings).

- **Completed:** The task is expected to be completed by the end of 2021. Amendments, frameworks, and specifications are considered “Completed” once the Council has taken final action.
- **In Progress:** The task is on track, and work will carry over into the following year.
- **Ongoing:** The task is part of the Council’s routine activities and does not have an expected end point.
- **Delayed or Postponed:** The original timeline has shifted.

(A) before an item signifies that it is an addition to the deliverables originally approved for 2020

Deliverable	Expected status by end of 2021	Notes
<b>Summer Flounder, Scup, Black Sea Bass</b>		
Develop 2022-2023 specifications for summer flounder, scup, and black sea bass	Completed	
Develop 2022 recreational management measures for summer flounder, scup, and black sea bass	Completed	
Review and potentially revise commercial minimum mesh size regulations and exemptions for summer flounder, scup, and black sea bass	In Progress	Further review needed. Council may hire a contractor to conduct an in-depth analysis of multiple commercial measures within the FMP including mesh size regulations
Develop advisory panel fishery performance reports	Completed	
Continue development of a framework action and technical guidance documents to address the prioritized Recreational Reform Initiative topics.	In Progress	Recreational Harvest Control Rule Framework/Addendum is in progress. Other framework and technical guidance document topics are delayed.
Begin development of an amendment to consider recreational sector separation and recreational catch accounting for summer flounder, scup, black sea bass, and bluefish.	Delayed	Delayed to allow more staff time to be dedicated to the Harvest Control Rule Framework/Addendum.
Evaluate commercial scup discards and gear restricted areas	Postponed	This evaluation focuses on previous year discards compared with overall trends. Commercial discards were not available for 2020 due to 6 month suspension of observer program.

Deliverable	Expected status by end of 2021	Notes
Complete the Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment	Completed	Final action expected Dec 2021. Additional staff work related to rulemaking will occur in 2022.
Continue development of the Ecosystem Approach to Fisheries Management (EAFM) management strategy evaluation (MSE) for summer flounder	In Progress	Project is on track. Council and Board approved range of objectives and alternatives for evaluation in August. Expected completion – May/June 2022.
Support management track assessments for summer flounder, scup, and black sea bass	Completed	
(A) Support industry and MSC requests during Scup MSC certification process	In Progress	
(A) Consider ASMFC remand of Black Sea Bass Commercial Allocation Amendment	Completed	The remand resulted in modifications to final action. Rulemaking is expected in 2022 for the 2023 fishing year. The Commission will implement the state allocation changes for the 2022 fishing year.
(A) Support 2022 research track assessment for black sea bass	Ongoing	
<b>Bluefish</b>		
Develop 2022-2023 bluefish specifications	Completed	
Develop 2022 bluefish recreational management measures	Completed	
Develop advisory panel fishery performance report	Completed	
Complete the Bluefish Allocation and Rebuilding Amendment	Completed	
Initiate action to implement a possession limit for frigate and bullet mackerel in the Mid-Atlantic	Delayed	No progress expected in 2021 due to other priorities. Note: This action was proposed for inclusion in the Bluefish FMP due to the high co-occurrence of bullet/frigate mackerel and bluefish catch.
Support management track assessment for bluefish	Completed	
(A) Support 2022 research track assessment for bluefish	Ongoing	
<b>Golden and Blueline Tilefish</b>		
Review 2022 specifications for golden tilefish and develop 2023-2024 specifications	Completed	
Develop 2022-2024 blueline tilefish specifications	Completed	

Deliverable	Expected status by end of 2021	Notes
Develop advisory panel fishery performance reports	Completed	
Review performance of private recreational tilefish permitting and reporting	Completed	
Support management track assessment for golden tilefish	Completed	
Initiate golden tilefish multi-year specifications framework (EO 13921 recommendation)	Completed	
Review 2020 tilefish survey report and consider funding/logistics for 2022 survey	Completed	
<b>Mackerel, Squid, Butterfish (MSB)</b>		
Review 2022 Atlantic mackerel, chub mackerel, longfin, and butterfish specifications	Completed	
Develop 2022 <i>Illex</i> specifications	Completed	
Consider modifications to the <i>Illex</i> incidental possession limit during closures (EO 13921 recommendation)	Completed	No changes recommended by Council.
Consider modifications to the butterfish minimum mesh size regulations (EO 13921 recommendation)	Completed	No changes recommended by Council.
Develop advisory panel fishery performance reports	Completed	
Review butterfish cap performance report	Completed	
Review HMS/chub mackerel diet study final report	Completed	
Support management track assessment for Atlantic mackerel	Completed	
Support research track assessments for butterfish and <i>Illex</i> squid (including possible additional <i>Illex</i> working group products)	Ongoing	Peer reviews are in 2022.
(A) Mackerel Rebuilding 2.0 FW	In Progress	
(A) Modification of 2021 <i>Illex</i> quota (implemented via MSB Specs final rule)	Completed	
<b>River Herring and Shad (RH/S)</b>		
Review RH/S cap performance and RH/S update	Completed	
(A) RH/S Run Count Story Map	Completed	Carried over from 2020
<b>Spiny Dogfish</b>		
Review 2022 spiny dogfish specifications	Completed	

Deliverable	Expected status by end of 2021	Notes
Develop advisory panel fishery performance report	Completed	
Develop spiny dogfish trip limit white paper (EO 13921 recommendation)	Completed	
(A) Support 2022 research track assessment for spiny dogfish	Ongoing	
<b>Surfclam and Ocean Quahog</b>		
Review 2022 specifications for surfclam and ocean quahog	Completed	
Develop advisory panel fishery performance reports	Completed	
Continue work on an action to address issues with surfclam and ocean quahog species separation requirements	In Progress	The Council will review a white paper and discuss next steps in December
Review surfclam genetic study final report	In Progress	To be reviewed in 2022
<b>Science and Research</b>		
Convene a workshop to review and consider redevelopment of the research set-aside (RSA) program	Completed	Three webinar workshops (July, August, October) and one in-person workshop (November)
Conduct a biennial review and update of the 2020-2024 research priorities document	In Progress	Scheduled for the December 2021 Council meeting.
Convene a joint Council/SSC meeting	Completed	
Review outcomes and recommendations from SSC Economic Work Group	In Progress	Input part of RSA Workshops to date. Final Work Group products to be presented at December 2021 Council meeting.
Support the Fishery Dependent Data Initiative (GARFO lead)	Ongoing	Continue to work with GARFO on this initiative including electronic reporting
(A) Establish an SSC Ecosystem Work Group	Completed	
(A) Ocean City, MD Video project	In Progress	Covid, tech issues, and additional video capture may delay into early 2022 (not on 2021 deliverables as originally scheduled for completion in late 2020)
(A) SSC sub-group peer review of recreational fishing models	Completed	Peer review meeting was held on September 20, 2021. Peer review report and next steps are currently under development.
<b>Ecosystem and Ocean Planning/Habitat</b>		
Develop and review the 2021 EAFM risk assessment report	Completed	
Coordinate the Northeast Regional Habitat Assessment (NRHA)	In Progress	To be completed July 2022

Deliverable	Expected status by end of 2021	Notes
Continue work on the Essential Fish Habitat (EFH) Redo	Delayed	Work to advance upon completion of NRHA
Maintain joint MAFMC and New England Fishery Management Council (NEFMC) offshore wind web pages	Ongoing	
Develop habitat- and fishery-related comments on offshore energy development	Ongoing	
Continue development of East Coast climate change and distribution shift scenario planning initiative	In Progress	Project currently on schedule. Currently doing public scoping; focused workshops late 2021 and early 2022. Completion expected late 2022.
(A) SSC and EOP Committee review of thread herring exempted fishing permit application	Completed	
<b>General</b>		
Review commercial landings of unmanaged species	Completed	
Complete advisory panel reappointment for all APs	Completed	
Develop comment letters to various agencies regarding E.O. 13921 recommendations	Completed	
(A) Participate on CCC Working Groups and Subcommittees (Habitat, Area-Based Management, Legislative)	Ongoing	
(A) Transition to Webex for virtual meetings	Completed	
<b>Communication and Outreach</b>		
Continue to implement the Council communication and outreach plan	Ongoing	
Develop and maintain Council action web pages	Ongoing	
Develop fact sheets and outreach materials as needed	Ongoing	
Establish a Communication/Outreach Advisory Panel	Completed	
Conduct virtual or in-person workshops to support commercial eVTR implementation	Completed	
Maintain general and issue-specific email distribution lists	Ongoing	
<b>Staff Wrap-Up on Completed Council Actions</b>		
///ex Permit and MSB Goals and Objectives Amendment	Completed	Awaiting NMFS EA edits as of 9/22/2021



Deliverable	Expected status by end of 2021	Notes
<b>Possible Additions</b> <i>The items below were included in the 2021 Implementation Plan to be considered if time and resources allowed.</i>		
Establish a working group to evaluate potential approaches for incorporating additional stakeholder knowledge and input in the stock assessment process		
Review red crab and lobster fishery exemptions for discrete deep sea coral protected zones		
Initiate action to address right whale issues	In Progress	More clarity anticipated after Oct. Council Meeting
Develop a white paper on collecting fixed/variable costs and employment information (for all Northeast fisheries)		
Modify list of ecosystem component species from Unmanaged Forage Amendment (e.g., addition of cancer crabs)		

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# 2022 Proposed Actions and Deliverables

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## Summer Flounder, Scup, Black Sea Bass

1. Review 2023 specifications for summer flounder, scup, and black sea bass
2. Review/Develop 2023 recreational management measures for summer flounder, scup, and black sea bass
3. Develop advisory panel fishery performance reports
4. Evaluate commercial scup discards and gear restricted areas
5. Complete Recreational Harvest Control Rule Framework/Addendum for summer flounder, scup, black sea bass, and bluefish
6. Continue development of an amendment to consider recreational sector separation and recreational catch accounting for summer flounder, scup, black sea bass, and bluefish
7. Continue development of a framework action and technical guidance documents to address the remaining prioritized Recreational Reform Initiative topics for summer flounder, scup, black sea bass, and bluefish
8. Support 2022 research track assessment for black sea bass
9. Review and potentially revise commercial minimum mesh size regulations and exemptions for summer flounder, scup, and black sea bass
10. Complete the Ecosystem Approach to Fisheries Management (EAFM) management strategy evaluation (MSE) for summer flounder

## Bluefish

11. Review 2023 specifications for bluefish
12. Review/Develop 2023 recreational management measures for bluefish
13. Develop advisory panel fishery performance reports
14. Support 2022 research track assessment for bluefish

*Note: Deliverables 5, 6, and 7 in the previous section will also address bluefish recreational management issues*

## Golden and Blueline Tilefish

15. Review 2023 specifications for golden tilefish
16. Review 2023 specifications for blueline tilefish
17. Develop advisory panel fishery performance reports
18. Review performance of private recreational tilefish permitting and reporting
19. Conduct 2022 golden tilefish survey pending approval of funding/logistics
20. Initiate golden tilefish 5-year ITQ program review

## Mackerel, Squid, Butterfish (MSB)

21. Develop MSB advisory panel fishery performance reports
22. Develop 2023-2025 chub mackerel specifications

23. Complete Mackerel Rebuilding 2.0 Framework (including 2023-2024 specifications)
24. Develop 2023-2024 butterfish specifications
25. Review 2023 specifications for longfin squid
26. Review 2022 specifications for *Illex* and develop 2023 specifications for *Illex*
27. Support 2022 research track assessments for butterfish and *Illex*

#### River Herring and Shad (RH/S)

28. Develop 2023-2024 RH/S Cap via Mackerel Rebuilding 2.0 Framework

#### Spiny Dogfish

29. Support 2022 research track assessment for spiny dogfish
30. Develop 2023-2026 Specifications

#### Surfclam and Ocean Quahog

31. Review 2023 specifications for surfclam and ocean quahog
32. Develop advisory panel fishery performance reports
33. Continue work on an action to address surfclam and ocean quahog species separation requirements
34. Review surfclam genetic study final report

#### Science and Research

35. Complete final RSA workshop report with a recommendation on whether to redevelop the Mid-Atlantic RSA program
36. Approve SSC membership
37. Convene a joint Council/SSC meeting
38. Review outcomes and recommendations from SSC Ecosystem Work Group
39. Review outcomes and recommendations from SSC Economic Work Group
40. Support 2023 applying state-spaced model research track assessment
41. Complete Maryland Recreational Ocean Effort Video Estimation project

#### Ecosystem and Ocean Planning/Habitat

42. Maintain joint MAFMC and New England Fishery Management Council (NEFMC) offshore wind web pages
43. Develop habitat- and fishery-related comments on offshore energy development
44. Coordinate the Northeast Regional Habitat Assessment (NRHA)
45. Continue work on the Essential Fish Habitat (EFH) Redo
46. Develop and review the 2022 EAFM risk assessment report
47. Initiate comprehensive review and update to EAFM risk assessment
48. Continue development of East Coast climate change and distribution shift scenario planning initiative

#### General

49. Review commercial landings of unmanaged species

50. Participate on CCC Working Groups and Subcommittees (Habitat, Area-Based Management, Legislative)
51. Host 2022 CCC Meeting
52. Respond to requests for information associated with audits for MSC-certified fisheries (Atlantic surfclam, ocean quahog, Illex squid, longfin squid, spiny dogfish)

### Communication and Outreach

53. Continue to implement the Council communication and outreach plan
54. Develop new and maintain existing Council action web pages
55. Develop fact sheets and outreach materials as needed
56. Enhance the use of email distribution tools to inform and engage stakeholders
57. Increase the use of website analytics to better understand site performance and visitor traffic
58. Continue to grow the Council's YouTube channel

### Staff Wrap-Up on Completed Actions

*The following actions have been, or are expected to be, approved by the Council by the end of 2021 but will require staff work in 2022 to finalize for submission to NMFS:*

59. Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment
60. Black Sea Bass Commercial State Allocation Amendment

### Possible Additions

*To be considered for addition to the 2022 implementation plan if time and resources allow:*

61. Initiate action to address sea turtle bycatch in MAFMC trawl fisheries
62. Initiate action to address right whale issues
63. Initiate action to implement a possession limit for frigate and bullet mackerel in the Mid-Atlantic
64. Comment on thread herring exempted fishing permit application



## Mid-Atlantic Fishery Management Council

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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

# MEMORANDUM

**Date:** September 24, 2021  
**To:** Council  
**From:** Julia Beaty, staff  
**Subject:** HMS Diet Study

In 2018, the Council funded a study on the diets of yellowfin and bigeye tunas, and white and blue marlins, with the goal of better understanding the role of chub mackerel in the diets of these predators of stakeholder interest. Principal investigator Dr. Walt Golet will present the results of his research to the Council on October 5, 2021. A final report is not yet available. This memo summarizes the methods and conclusions relevant to chub mackerel based on Dr. Golet's recent presentations to the Mackerel, Squid, and Butterfish Advisory Panel and the Scientific and Statistical Committee.

Dr. Golet also provided detailed summary tables and figures, which are available [here](#).

For this study, 758 non-empty stomachs from yellowfin and bigeye tunas were obtained from commercial and recreational fisheries, including recreational fishing tournaments, from throughout the Mid-Atlantic and Southern New England, primarily in 2018 and 2019. Thirty six white marlin and 17 blue marlin stomachs were also obtained. The marlin sample sizes were limited by regulations on landings. Stomach contents were identified to the lowest possible taxonomic level using visual identification, hard part analysis, and genetic barcoding.

*Illex* squid were found to be one of the most important prey items in the stomachs of yellowfin and bigeye tunas. They were also found to a lesser extent in the marlin stomach samples.

Chub mackerel were determined to be an exceptionally small component of the diets of tunas and marlins. Specifically, only two chub mackerel were identified in yellowfin tuna stomachs and seven chub mackerel were identified in two white marlin stomachs.



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Christopher M. Moore, Ph.D., Executive Director

## MEMORANDUM

**Date:** September 24, 2021  
**To:** Council  
**From:** Julia Beaty, staff  
**Subject:** Review of 2022 Atlantic chub mackerel specifications

On October 5, 2021, the Mid-Atlantic Fishery Management Council (Council) will review the previously implemented 2022 specifications for Atlantic chub mackerel and discuss if revisions are necessary. Council staff, the Scientific and Statistical Committee, the Monitoring Committee, and the Advisory Panel all recommend no changes.

The following materials are provided behind this tab (unless otherwise noted) for the Council's consideration.

- 1) Summary of the September 14, 2021 Monitoring Committee webinar
- 2) September 2021 Scientific and Statistical Committee report (*behind the Committee Reports Tab*)
- 3) September 2021 Advisory Panel Fishery Performance Report
- 4) Staff memo on 2022 specifications for Atlantic chub mackerel
- 5) 2021 Chub Mackerel Fishery Information Document



**Mackerel, Squid, Butterfish Monitoring Committee**  
**September 14, 2021**  
**Webinar Meeting Summary**

**Monitoring Committee Attendees:** Julia Beaty (MAFMC staff), Doug Christel (GARFO), Jason Didden (MAFMC staff), Daniel Hocking (GARFO)

**Additional Attendees:** Katie Almeida (AP member), Greg DiDomenico (Lund's Fisheries, AP member), James Fletcher (United National Fisherman's Association), Zachary Greenberg (Pew Charitable Trusts), Jeff Kaelin (Lund's Fisheries, AP member), Eric Reid (NEFMC liaison to MAFMC), David Stormer (Council members), Alissa Wilson.

**Meeting Objectives**

- Review recent fishery information, Advisory Panel (AP) Fishery Performance Report, SSC recommendations, and staff recommendations.
- Review and if necessary, recommend revisions to the previously 2022 specifications.

**Monitoring Committee Discussion**

The Monitoring Committee recommended no changes to the previously approved 2022 chub mackerel specifications.

The Monitoring Committee agreed that the higher discard percentages shown in the observer data in recent years do not suggest a need to change the expected discards used in the specifications calculations because there was little, if any, targeted fishing effort and very low overall catch in those years. The acceptable biological catch (ABC) is based on the year with the historic high for landings and the highest targeted fishing effort.

The Council will consider the potential impacts of a recreational minimum fish size limit for Atlantic mackerel through the Atlantic Mackerel Rebuilding Framework. Some Council members questioned whether the same recreational minimum size limit should be implemented for chub mackerel due to challenges differentiating the species. The Monitoring Committee did not recommend for or against this approach, but discussed some relevant considerations. For example, monitoring and enforcement of a recreational Atlantic mackerel minimum size limit would be more effective if the same size limit also applied to chub mackerel. This could also improve compliance, avoid incentives to misreport species catch, and lead to better confidence in the fishery data used to monitor catch of both species. However, the Monitoring Committee questioned the conservation benefits of a minimum size limit given the likely high discard mortality rate for both species. For example, the Atlantic mackerel stock assessment assumes a 100% recreational discard mortality rate.

### **Input from Other Participants**

One AP member said he does not disagree with the recommendation of no changes for 2022, but thought the quota should increase in the future given the wide distribution of the stock and the ability of the species to sustain much larger fisheries in other parts of the world. He said this is an emerging fishery and there is market demand.

Another individual on the call agreed that the commercial fishery should be allowed to harvest more chub mackerel. He strongly recommended against a minimum size limit given concerns about discard mortality.



SSC Report is behind  
the Committee Reports  
tab.



## Chub Mackerel Fishery Performance Report

September 2021

The Mid-Atlantic Fishery Management Council's (Council's) Mackerel, Squid, and Butterfish Advisory Panel met via webinar on September 1, 2021 to review the 2021 Chub Mackerel Fishery Information Document and develop the following Fishery Performance Report. Dr. Walt Golet also presented preliminary findings on research funded by the Council to assess the importance of chub mackerel in the diets of tunas and marlins in the Mid-Atlantic.

The primary purpose of this Fishery Performance Report is to contextualize catch histories for the Scientific and Statistical Committee by providing information about fishing effort, market trends, environmental changes, and other factors.

Please note: Advisor comments described below are not consensus or majority statements.

**Advisory Panel members present:** Katie Almeida, Stefan Axelsson, Eleanor Bochenek, Gregory DiDomenico, Zack Greenberg, Meghan Lapp, Pam Lyons Gromen, Gerry O'Neill.

**Others present:** Julia Beaty (Council staff), Alan Bianchi (NC DMF), Doug Christel (GARFO staff), Jason Didden (Council staff), Gavin Fay (SSC member), James Fletcher, Walt Golet (University of Maine and Gulf of Maine Research Institute), Peter Hughes (Council member), Eric Reid (NEFMC member and liaison to MAFMC), Alissa Wilson

### Discussion questions:

1. What factors have influenced recent catch (markets/economy, environment, regulations, other factors)?
2. Are the current fishery regulations appropriate? How could they be improved?
3. What would you recommend as research priorities?
4. What else is important for the Council to know?

### Summary of Advisor Comments

#### Management Issues

Advisors did not recommend any changes to the chub mackerel management measures for 2022.

One participant on the webinar who is a member of other Advisory Panels strongly advised against consideration of a recreational minimum size limit as this will only create discards and anglers should keep what they catch. Consideration of a minimum size limit felt like the Council is "cutting and pasting" old ideas without attempting to find real solutions.

### Recreational Chub Mackerel Fishery

Marine Recreational Information Program (MRIP) data show increasing recreational chub mackerel harvest from Maine through North Carolina over the past five years. One advisor asked if similar trends are shown in the South Atlantic recreational harvest estimates. Staff said there was no estimated recreational chub mackerel harvest in South Carolina through the east Coast of Florida during 2018-2020.

Another advisor reminded the group that the 2020 MRIP estimates include imputed data to address data gaps resulting from suspension of the Access Point Angler Intercept Survey (APAIS) from the late spring through much of the summer in 2020 due to COVID-19. This creates uncertainty in the 2020 data. This advisor said, for this reason, it will be important to see how the 2021 estimates compare to the 2020 estimates.

### Relationship Between Chub Mackerel and Illex Availability

Dr. Walt Golet summarized his findings on the diets of yellowfin and bigeye tuna and white and blue marlin. Among other findings, his results suggest that *Illex* squid can be important in the diets of yellowfin and bigeye tuna, and to a lesser extent in the diets of marlins. One advisor noted that the commercial landings data and input from fishermen show that chub mackerel landings are low when availability of *Illex* is high and asked if something similar is happening in the diets of tunas and marlins. For example, do both the fisheries and diet trends suggest that chub mackerel are not as prevalent when *Illex* are abundant?

Dr. Golet emphasized that his results are a snapshot of tuna and marlin diets in 2018 and 2019 and that diets can change over time. Commercial fishery landings in 2018 and 2019 suggest that those were years with high availability of *Illex*.

Another advisor asked if any active commercial fishermen on the call could clarify if the inverse relationship between *Illex* squid and chub mackerel landings is because chub mackerel are not available in years of high *Illex* availability, or if this pattern is due to fishermen targeting *Illex*. One advisor who is an active commercial fisherman clarified that he does see chub mackerel during years of high *Illex* availability, but that chub mackerel tend to be found closer to shore than *Illex*.

### Chub Mackerel Distribution

Two advisors and one other participant on the webinar noted that chub mackerel can be abundant close to shore based on their own observations while fishing, observations of landings at a processing facility, or fishing reports and other anecdotal observations. One advisor said the Fishery Information Document should be revised in future years to make it more clear that chub mackerel can be found close to shore, as well as offshore.

### Research Priorities

One advisor said that although Dr. Golet's research represents a snapshot of 2018 and 2019, it does not suggest that further research is needed into the role of chub mackerel in the diets of tunas and marlins. Given the sample sizes obtained by Dr. Golet and difficulties in obtaining additional marlin samples, additional research would not be worthwhile and would likely not provide different conclusions. This advisor stated that Dr. Golet's research used a rigorous methodology and came to a clear conclusion that chub mackerel account for an exceptionally small component of the diet of tunas and marlins. This should conclude the issue.

Another advisor said they did not disagree, but noted that some of Dr. Golet's findings on the importance of *Illex* squid and bullet and frigate mackerel could warrant further exploration as those are species of interest to the Council. This advisor said this study was an important step towards better understanding the diets of tunas and marlins more broadly and considering the forage base from an ecosystem level.

A third advisor said they also agreed that Dr. Golet's findings do not suggest additional research is needed on the importance of chub mackerel as prey for tunas and marlins. The research suggest that these predators eat what is most available.

One advisor did not support the Council funding further research into the importance of *Illex* squid in the diets of tunas and marlins. This could be addressed in other ways, such as through the next research track assessment for *Illex*. This advisor noted that fishing mortality on *Illex* is low, the season is short, and the fishery is constrained, regardless of the size of the quota.



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

# MEMORANDUM

**Date:** August 30, 2021  
**To:** Chris Moore, Executive Director  
**From:** Julia Beaty, staff  
**Subject:** 2022 specifications for Atlantic chub mackerel

## Executive Summary

This memorandum includes information to assist the Mid-Atlantic Fishery Management Council's (Council's) Scientific and Statistical Committee (SSC) and Mackerel, Squid, and Butterfish (MSB) Monitoring Committee in reviewing the previously approved 2022 catch and landings limits for Atlantic chub mackerel (*Scomber colias*), as well as the other management measures which can be modified through the annual specifications process.

Additional information on fishery performance and past management measures can be found in the 2021 Chub Mackerel Fishery Information Document and the 2021 Chub Mackerel Fishery Performance Report developed by advisors.<sup>1</sup>

The Council approved 2020-2022 catch and landings limits for Atlantic chub mackerel (Table 1) in March 2019 based on the SSC's acceptable biological catch (ABC) recommendations. These measures were implemented through Amendment 21 to the MSB Fishery Management Plan (FMP) and became effective in September 2020 (85 Federal Register 47103). The SSC, Monitoring Committee, and Council reviewed these measures in the fall of 2020 and recommended no changes for 2021.

During their September 2021 meeting, the SSC will review their previously recommended 2022 ABC and consider if revisions are necessary. The Monitoring Committee will then meet to review and, if appropriate, recommend changes to the previously approved 2022 annual catch limit (ACL), annual catch target (ACT), and total allowable landings limit (TAL), and other management measures which can be modified through the annual specifications process.

The Council will meet in October 2021 to review the recommendations of the SSC and Monitoring Committee, as well as input from advisors. They will then consider revising their previously approved catch and landings limits for 2022, and any other management measures which can be modified through the annual specifications process.

Pending additional input provided by advisors during their meeting on September 1, Council staff recommend no revisions to the previously approved 2022 specifications for chub mackerel.

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<sup>1</sup> Both documents will be posted to <https://www.mafmc.org/fishery-performance-reports>.

**Table 1.** Previously approved 2020-2022 catch and landings limits for Atlantic chub mackerel.

Measure	mil lb	mt	Basis
ABC	5.07	2,300	SSC recommendation
Expected SC-FL catch	0.08	38	A conservative estimate based on the highest annual SC-FL landings shown in commercial dealer and MRIP data, increased by about 10% to account for discards, which are not well quantified.
ACL	4.99	2,262	ABC minus expected SC-FL catch.
ACT	4.79	2,171	ACL reduced by a 4% management uncertainty buffer.
Expected total dead discards, ME-NC	0.29	130	6% of ACT based on based on the commercial discard rate during 2003-2017 according to northeast observer data.
TAL	4.50	2,041	ACT minus expected total dead discards.

### **Recent Catch and Landings**

After remaining below 0.5 million pounds per year for many years, commercial chub mackerel landings spiked to 5.25 million pounds in 2013, but decreased to pre-2013 levels by 2016. In 2020, 56,925 pounds of chub mackerel were landed by commercial fishermen from Maine through North Carolina. Recreational chub mackerel landings are variable and averaged 105,062 pounds per year during 2016-2020. In 2020, recreational fishermen harvested an estimated 149,578 pounds of chub mackerel (Table 2).

**Table 2.** Commercial and recreational chub mackerel landings, in pounds, 2001-2020, from Maine through North Carolina. Landings in some years are combined to protect confidential data associated with fewer than three vessels and/or dealers.

Year	Commercial landings	Recreational landings	Total landings
2001	4,384	0	4,384
2002	471	0	471
2003	488,316	0	488,316
2004	126	0	126
2005	0	0	0
2006	0	0	0
2007-2009	21,039	0	21,039
2010-2011	192,301	355	192,656
2012	164,867	0	164,867
2013	5,249,686	0	5,249,686
2014	1,230,411	48,087	1,278,498
2015	2,108,337	0	2,108,337
2016	610,783	2,093	612,876
2017	2,202	14,831	17,033
2018	22,357	128,949	151,306
2019	60,522	74,462	134,984
2020	56,925	149,578	206,503
<b>2001-2020 avg</b>	<b>600,749</b>	<b>24,609</b>	<b>625,358</b>

## **Stock Status and Biological Reference Points**

The stock status of chub mackerel in the western Atlantic Ocean is unknown as there have been no quantitative assessments of this species in this region. In July 2018, the SSC assumed that biomass is currently at or above biomass at maximum sustainable yield, as described in more detail in the following section.

## **Review of Prior SSC Recommendations**

The SSC recommended the current chub mackerel ABC during their July 2018 meeting. They concluded that insufficient information exists to assess the status and trends of chub mackerel in the northwest Atlantic. They concluded that an overfishing limit could not be specified and recommended an ABC of 2,300 mt (5.07 million pounds) based on expert judgement. Their ABC recommendation is based loosely on the historic high for commercial and recreational landings (around 5.25 million pounds in 2013) and assumptions about discards. This level of ABC will prevent the fishery from achieving its historic high, but will allow landings to exceed those in every other year over at least the past 20 years (Table 2). The SSC agreed that this level of catch is unlikely to result in overfishing given the general productivity of this species in fisheries throughout the world combined with the relatively low fishery capacity in U.S. Atlantic waters. Based on their recommendations, the ABC applies to total dead catch (i.e., commercial and recreational landings and dead discards) from Maine through the east coast of Florida.

The SSC determined the following to be the most significant sources of scientific uncertainty associated with the ABC:

- Stock size and productivity cannot be determined, there is no information to determine reference points for stock biomass levels, and little information exists to determine reference points for fishing mortality rates.
- There is no information on the source of recruits; it is unknown whether chub mackerel are episodic in the Mid-Atlantic, whether this is a range expansion with localized spawning, or neither.
- There is no information on predation mortality, or on the role of chub mackerel in predator diets.
- There is very high uncertainty in recreational landings and discards. Observer coverage on fisheries likely to catch chub mackerel may be low (*Illex* fleet, Mid-Atlantic small mesh bottom trawl).

The SSC reviewed their recommendations in September 2020 and recommended no changes.

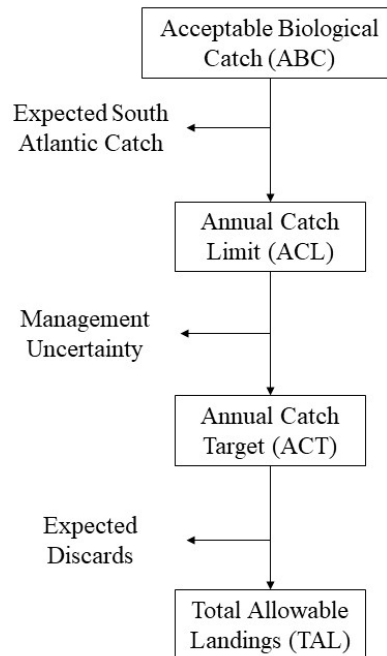
## **Annual Catch Limit**

The ACL for chub mackerel is derived by subtracting expected catch from South Carolina through the east coast of Florida from the ABC (Figure 1). When the Council adopted 2020-2022 specifications in March 2019, they approved a value of 84,500 pounds of expected catch from South Carolina through the east coast of Florida. This represents about 2% of the ABC and was intended to be a conservative estimate based on the highest annual South Atlantic landings shown in commercial dealer and Marine Recreational Information Program (MRIP) data through 2017 (i.e., 76,835 pounds in 2011), increased by about 10% to account for discards. Chub mackerel discards in the South Atlantic are highly uncertain.

As previously stated, when the Council approved a value of 84,500 pounds of expected South Atlantic catch, they considered data through 2017. MRIP data for 2018-2020 show no estimated recreational chub mackerel harvest from South Carolina through the east coast of Florida.

Atlantic Coastal Cooperative Statistics Program data show commercial landings amounts that are confidential, but less than 200 pounds in total during 2018-2020.

Staff recommend no changes to the 2021 chub mackerel ACL of 4.99 million pounds (2,262 mt).



**Figure 1.** Flowchart summarizing chub mackerel catch and landings limits.

### **Annual Catch Target**

As defined in the FMP, The ACT can be set less than or equal to the ACL to account for management uncertainty (Figure 1). The Council adopted a 4% management uncertainty buffer when they set the 2020-2022 specifications in March 2019. Considered in combination with the in-season commercial fishery closure regulations described on the next page, this was expected to be a reasonable buffer between the ACL and ACT to prevent ACL overages.

Council staff recommend no changes to the previously implemented ACT of 4.79 million pounds (2,171 mt).

### **Discards**

Expected commercial and recreational discards in weight are subtracted from the ACT to derive the TAL (Figure 1). When setting 2020-2022 specifications in March 2019, the Council agreed to reduce the ACT by 6% to account for expected discards. This was based on the commercial discard rate during 2003-2017 according to northeast observer data. The Council selected this as a preferred alternative because it was based on 15 years of data. It does not explicitly account for recreational data; however, based on information available at the time, the volume of recreational chub mackerel discards was assumed to be low compared to commercial discards, especially in years with targeted commercial fishing effort. The previously implemented catch and landings limits are based loosely on years with targeted commercial fishing effort.

There are currently no expanded estimates of total chub mackerel commercial dead discards. Discard percentages based on observer and vessel trip report (VTR) data through 2020 are shown in Table 3. The most recent 5 years of observer data show that 43% of total observed chub



mackerel catch was discarded, considerably higher than the 6% assumed discard rate previously used to set specifications. As shown in Table 2, 2016-2020 were years with comparatively low commercial landings. As previously stated, the 2022 ABC is loosely based on the historic high for chub mackerel catch (2013). The average percentages over longer time periods are approximately 3% - 7%, depending on the time period and dataset (Table 3).

Staff recommend no changes to the previously implemented 2021 TAL of 4.50 million pounds (2,041 mt) at this time.

**Table 3.** Percent of total commercial chub mackerel catch that was discarded, based on northeast fisheries observer and VTR data, 2006-2020, with associated number of trips.

<b>Years</b>	<b>Observer Discard %</b>	<b>VTR Discard %</b>
<b>2006-2020</b> (15 years)	7% (337 trips)	3% (869 trips)
<b>2011-2020</b> (10 years)	6% (301 trips)	3% (854 trips)
<b>2016-2020</b> (5 years)	43% (193 trips)	4% (582 trips)
<b>2013-2015</b> (top 3)	4% (95 trips)	3% (282 trips)
<b>2013</b> (historic high)	3% (27 trips)	1% (63 trips)

### **Possession Limits**

Under the currently implemented specifications, there is no recreational chub mackerel possession limit. There is no commercial possession limit until 90% of the TAL is projected to be landed. At that point, a 40,000 pound (18 mt) possession limit is in effect. Once 100% of the TAL is projected to be landed, commercially permitted vessels are limited to a 10,000 pound (4.5 mt) possession limit. When setting 2020-2022 specifications, the Council agreed that commercial fishery possession limits prior to in-season closure were unnecessary as the preferred in-season AMs were likely sufficient to constrain the fishery to prevent ACL overages.

According to stakeholder input provided during development of the Unmanaged Forage Omnibus Amendment, 40,000 pounds is approximately the amount of chub mackerel needed to fill a bait truck. Given the low value of chub mackerel (e.g., \$0.51 per pound in 2020 dollars on average during 2001-2020), fishermen may not target chub mackerel when restricted to a 40,000 pound possession limit; however, they would have an incentive to land chub mackerel caught incidentally. A 40,000 pound possession limit could, therefore, discourage discards. The number of trips which landed more than 40,000 pounds of chub mackerel over the past 20 years is confidential as it is associated with fewer than three vessels and/or dealers.

Ten thousand pounds was selected as the possession limit to be implemented in-season after the TAL is projected to be fully landed because it is approximately the average trip-level landings of chub mackerel based on northeast commercial fishery data for 1998-2017. A small number of vessels are responsible for most chub mackerel landings. If those vessels are excluded from the calculation, about 99% of the trips which landed chub mackerel during 1998-2017 landed less than 10,000 pounds. Trip-level landings for 2011-2020 show very similar patterns (i.e., about 11,000 pounds per trip on average and 99% of trips landing less than 12,000 pounds).

As previously stated, unless modified, the 2021 TAL will be 4.50 million pounds (2,041 mt). Therefore, a commercial possession limit will be triggered once 4.05 million pounds (1,837 mt) of chub mackerel are projected to be landed by commercial and recreational fishermen. This level of landings has been reached only once over the past 20 years (i.e., in 2013, Table 2).

Council staff recommend no changes to the commercial or recreational chub mackerel possession limits for 2022.

## **Other Management Measures**

There are no commercial or recreational minimum fish size limits for chub mackerel in federal waters. Minimum fish size limits are typically used to reduce fishing mortality on immature fish; however, a commercial minimum size limit for chub mackerel may provide little additional biological benefits considering current fishery selectivity. According to an analysis of observer data done for Amendment 21, about 88% of the chub mackerel caught in bottom otter trawls are at least 20 cm in length. As suggested in Daley and Leaf (2019)<sup>2</sup> and supported by comments from fishermen, it is possible that chub mackerel's fast swimming speed reduces the potential for capture of larger individuals in the commercial fishery. Several scientific studies have documented the length at maturity for chub mackerel in various regions. The length at maturity varies by study. Daley (2018)<sup>3</sup> examined chub mackerel caught in commercial fisheries in the Mid-Atlantic and Southern New England and found that 50% of females reached maturity at about 27 cm. According to observer data, about 73% of the chub mackerel caught in bottom trawls are at least 27 cm.

Given that chub mackerel are predominantly caught with bottom otter trawls in commercial fisheries off the U.S. east coast, it can be assumed that most discarded chub mackerel would not survive. Therefore, a minimum fish size likely would increase mortality on this species without notable benefits of protecting immature fish.

Most chub mackerel landed on the U.S. east coast over the past 20 years were caught on bottom trawl vessels which also participate in the *Illex* squid fishery. Regulations for that fishery specify gear requirements (see 50 CFR 648.23), including gear restrictions for specific regulated mesh areas (50 CFR 648.80). The Council did not see a need to develop additional gear restrictions for chub mackerel beyond what vessels are currently subject to in other fisheries. There are also no recreational gear restrictions for chub mackerel in federal waters.

At this point in time, Council staff do not recommend that the Council implement new chub mackerel management measures such as minimum fish sizes, closed seasons, or gear restrictions.

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<sup>2</sup> Daley, T. T. and R. T. Leaf. 2019. Age and growth of Atlantic chub mackerel (*Scomber colias*) in the Northwest Atlantic. *Journal of Northwest Atlantic Fisheries Science*. 50: 1-12.

<sup>3</sup> Daley, T. 2018. Growth and reproduction of Atlantic chub mackerel (*Scomber colias*) in the Northwest Atlantic. Master's thesis. University of Southern Mississippi.



## Chub Mackerel Fishery Information Document

August 2021

This document provides a brief overview of the biology, stock condition, management system, and fishery performance for Atlantic chub mackerel (*Scomber colias*) with an emphasis on the most recent few years. Data sources include commercial dealer reports, vessel trip reports (VTRs), and Marine Recreational Information Program (MRIP) data. All 2020 data should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <https://www.mafmc.org/msb>.

### Key Facts

- The Mid-Atlantic Fishery Management Council developed the first management measures for Atlantic chub mackerel in U.S. waters. These measures became effective in 2017 and were modified in 2020.
- The stock status of chub mackerel in this region is unknown as there has been no quantitative stock assessment. The Scientific and Statistical Committee assumes that biomass is currently at a sustainable level.
- After spiking at 5.25 million pounds in 2013, commercial landings returned to low levels. In 2020, commercial fishermen landed 56,925 pounds of chub mackerel from Maine through North Carolina.
- It is estimated that recreational fishermen from Maine through North Carolina harvested 149,578 pounds of chub mackerel in 2020, the highest estimate in the MRIP time series (i.e., 1981 through present).

### Basic Biology

Atlantic chub mackerel are a schooling pelagic species. They migrate seasonally and can be found throughout U.S. Atlantic waters to depths of about 250-300 meters.<sup>1</sup> Adults prefer temperatures of 15-20°C (about 60-70°F).<sup>1,2</sup> Some studies suggest that juveniles tend to be found closer inshore than adults.<sup>3,4</sup>

Atlantic chub mackerel grow rapidly during the first year of life.<sup>2,3,5,6</sup> They can reach at least age 13.<sup>7</sup> Daley and Leaf (2019) found that most fish sampled from commercial fishery catches off the northeast U.S. were age 3.<sup>6</sup>

Atlantic chub mackerel spawn in several batches. Spawning areas likely occur from North Carolina through the Gulf of Mexico.<sup>8,9</sup> Daley (2018) suggested that chub mackerel reach maturity around age two in the Northwest Atlantic, though other studies from various locations have published a range of ages at maturity.<sup>3,9</sup>

Chub mackerel are opportunistic predators with a seasonally variable diet of small crustaceans (especially copepods), small fish, and squid.<sup>1,10</sup> Adults tend to consume larger prey and more fish prey than juveniles.<sup>4</sup>

Very few quantitative estimates of the contribution of chub mackerel to the diets of predator species in the western North Atlantic are available. This is likely due in part to the difficulty of visually distinguishing partially-digested chub mackerel from related species such as Atlantic mackerel (*Scomber scomber*), bullet mackerel (*Auxis rochei*), and frigate mackerel (*Auxis thazard*).<sup>11</sup> The family Scombridae has been documented in the diets of some fish, marine mammals, sea birds, and sharks in the western North Atlantic.<sup>12,13</sup> However, few studies identify chub mackerel to the species level in the diets of any predators. A thorough literature review conducted by Council and NMFS staff in 2018 identified only one study with quantitative data on the role of chub mackerel in the diets of any predators off the U.S. east coast.<sup>14</sup> Manooch et al. (1984) found that chub mackerel made up 0.2% (by frequency of occurrence) of the diets of dolphinfish sampled off North Carolina through Texas.<sup>15</sup> Chub mackerel have been documented as prey for some predators in other parts of the world. For example, they are important prey for blue marlin at certain times of year off Portugal<sup>16</sup> and Cabo San Lucas.<sup>17</sup> They have also been documented as prey for Cory's shearwaters in the eastern North Atlantic, for long-beaked common dolphins off South Africa, and short-beaked common dolphins off the Iberian Peninsula.<sup>18</sup> It should be emphasized that diet composition of a predator species may vary by geography and can be flexible. Therefore, the importance of chub mackerel in the diets of predators in other parts of the world does not necessarily indicate its importance off the U.S. east coast. More diet information would be required to better establish this relationship.

In 2018, the Council funded a study with the goal of better delineating the role of chub mackerel in the diets of tunas and marlins, which were identified by stakeholders as predators of key interest. Preliminary results will be presented to the Mackerel, Squid, and Butterfish Advisory Panel and the Scientific and Statistical Committee (SSC) in September 2021.

### **Status of the Stock**

The stock status of chub mackerel in the western Atlantic Ocean is unknown as there have been no quantitative assessments of this species in this region. The SSC assumes that biomass is currently at or above biomass at maximum sustainable yield.<sup>19</sup>

Large fluctuations in abundance have been reported around the world, including in the mid-Atlantic and New England.<sup>3, 20</sup> These fluctuations may be partly the result of environmental influences such as temperature and upwelling strength on recruitment.<sup>3</sup> Given that chub mackerel are a fully pelagic species, ocean processes likely influence their availability in any given area, as well as their recruitment.

### **Management System and Fishery Performance**

#### *Management*

The Mid-Atlantic Fishery Management Council manages Atlantic chub mackerel fisheries in federal waters from Maine through North Carolina.

An increase in commercial landings during 2013-2015, as well as concerns about the potential role of chub mackerel as prey for tunas and marlins, prompted the Council to adopt an annual commercial landings limit and a commercial possession limit for chub mackerel as part of the Unmanaged Forage Omnibus Amendment.<sup>13</sup> These measures were implemented in September 2017 and were the first regulations for chub mackerel fisheries off the U.S. east coast. They were intended to be temporary measures and were replaced by longer-term measures developed

through Amendment 21 to the Mackerel, Squid, and Butterfish Fishery Management Plan and became effective in September 2020.<sup>21</sup>

The Council's SSC recommends annual acceptable biological catch (ABC) limits for chub mackerel. The Council must either approve the ABC recommended by the SSC or approve a lower ABC. Total catch (i.e., commercial and recreational landings and dead discards) from Maine through the east coast of Florida count against the ABC. Expected South Carolina through Florida catch is subtracted from the ABC to derive the annual catch limit (ACL). An annual catch target (ACT) is set less than or equal to the ACL to account for management uncertainty. Expected dead discards are subtracted from the ACT to derive a total allowable landings limit (TAL). The commercial and recreational fisheries do not have separate annual catch or landings limits (Figure 1).

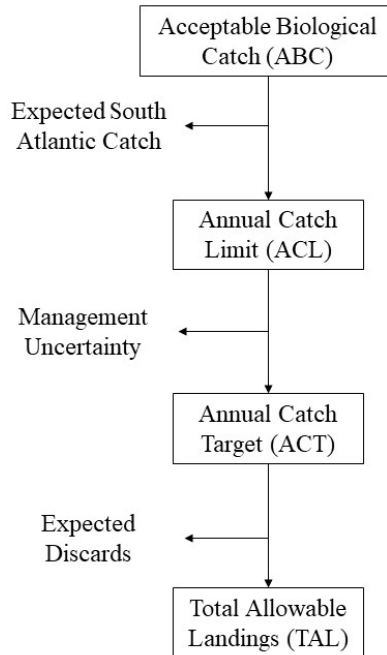
Unless revised, the 2022 catch and landings limits include an ABC of 5.07 million pounds, an ACL of 4.99 million pounds, an ACT of 4.79 million pounds, and a TAL of 4.50 million pounds. These limits have been unchanged since they were implemented in 2020.

Although total catch from Maine through the east coast of Florida counts against the ABC, the ACL, ACT, and TAL apply to Maine through North Carolina. Based on past landings trends, the Council agreed that catch from South Carolina through Florida is immaterial to proper management. Therefore, commercial and recreational fisheries in South Carolina through Florida are not subject to the permit and possession limit requirements described below.

A commercial mackerel, squid, or butterfish fishing permit is required of vessels which retain chub mackerel for sale in federal waters from Maine through North Carolina. Ten permit types meet this requirement. The owner of any party or charter vessel that fishes for, possesses, or retains chub mackerel while carrying passengers for hire must have the federal mackerel/squid/butterfish for-hire permit. There is no federal permit type specific to Atlantic chub mackerel in either the commercial or recreational fisheries.

There is no commercial possession limit for chub mackerel until 90% of the TAL is projected to be landed. At that point, a 40,000 pound possession limit is in effect. Once 100% of the TAL is projected to be landed, commercially-permitted vessels are limited to a 10,000 pound possession limit. There are no federal waters recreational possession limits for chub mackerel.

There are no commercial or recreational gear restrictions, fish size requirements, or closed seasons for Atlantic chub mackerel in federal waters.



**Figure 1. Flowchart summarizing chub mackerel catch and landings limits.**

### *Commercial Fishery Trends*

After remaining below 0.5 million pounds per year for several years, commercial chub mackerel landings spiked to 5.25 million pounds in 2013, but decreased to pre-2013 levels by 2016 (Table 1).<sup>22</sup> This temporary increase was the result of a small number of trawl vessels targeting chub mackerel. These vessels also participate in the *Illex* squid fishery. Some fishermen have described chub mackerel as a “bailout” species which they sometimes target when they are not able to harvest *Illex* squid. Chub mackerel tend to be harvested in the same areas and times of year when *Illex* squid are harvested; however, fishermen have said they typically will not harvest both species at the same time because the quality of both species suffers when they are stored together.

According to public comments, a small number of vessels on the east coast are capable of harvesting chub mackerel in profitable quantities because vessels need to be large, fast, and have refrigerated sea water or freezing capabilities in order to harvest this fast-swimming, low-value, warm water species. Landings data seem to support these statements.

Fewer than 5 vessels accounted for more than 95% of chub mackerel landings over the last 20 years (2001-2020). The chub mackerel landings from these vessels were sold to fewer than three dealers; therefore, much of the data associated with these vessels and dealers are confidential.<sup>22</sup>

At least 19 dealers across 6 states (MA, RI, CT, NY, NJ, VA) purchased at least 100 pounds of chub mackerel over the past 20 years combined (2001-2020), with only four dealers purchasing more than 10,000 pounds of chub mackerel. During this time period, an average of 6 vessels, with a maximum of 20 vessels, landed at least 100 pounds of chub mackerel per year from Maine through North Carolina.<sup>22</sup>

The annual average ex-vessel price per pound varied during 2001-2020, averaging \$0.51 per pound (adjusted to 2020 dollars). There appears to be a relationship between price and volume landed; however, this relationship is neither linear nor consistent across time. In general, years with higher landings had lower average annual prices per pound, and vice versa (Table 1).<sup>22</sup>

According to VTR data, about 91% of the chub mackerel landed by commercial fishermen from Maine through North Carolina from 2001 through 2020 were caught with bottom otter trawls.<sup>23</sup>

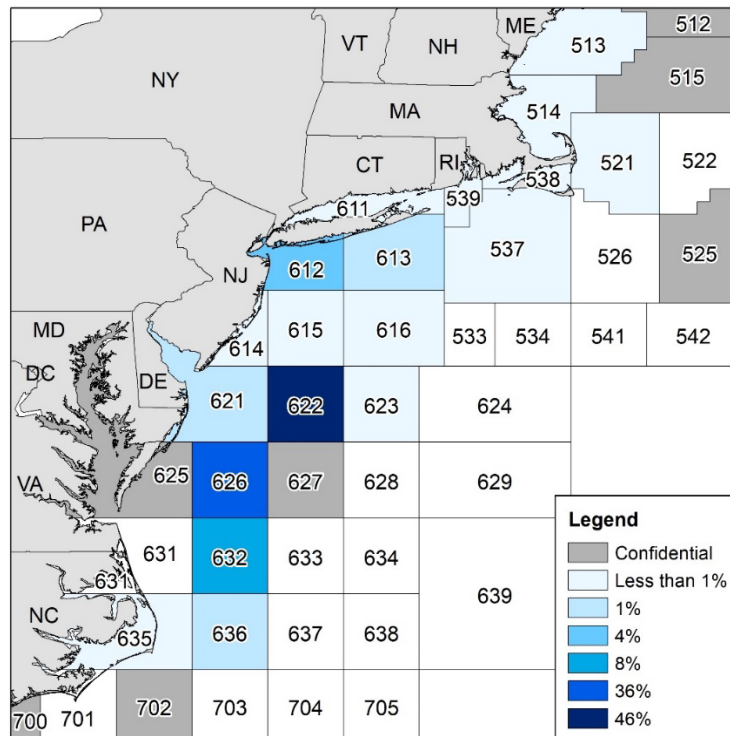
Nearly all commercial chub mackerel landings (>97%) from Maine through North Carolina over the past 20 years occurred during June-October. The highest proportion of landings occurred in September (38%). June, July, August, and October contributed about equally to commercial landings (13-16%).<sup>22</sup>

According to VTR data, nearly all commercial chub mackerel landings from 2001-2020 originated from statistical areas south of New York. Much of these landings came from statistical areas which overlap with the shelf break (Figure 2).<sup>23</sup>

Public comments received during development of Amendment 21 suggest that most chub mackerel landed on the east coast are processed for use as human food, much of which is sent overseas, and lesser amounts are used as bait in other fisheries.

**Table 1. Commercial chub mackerel landings (pounds), ex-vessel value, and average price per pound, Maine through North Carolina, 2001-2020. Value and price are adjusted to 2020 dollars using the Gross Domestic Product Price Deflator. Landings in some years are combined to protect confidential data representing fewer than 3 vessels and/or dealers.<sup>22</sup>**

<b>Year</b>	<b>Landings (pounds)</b>	<b>Ex-vessel value (2020 dollars)</b>	<b>Avg. price/pound (2020 dollars)</b>
2001	4,384	\$6,179	\$1.41
2002	471	\$287	\$0.61
2003	488,316	\$33,622	\$0.07
2004	126	\$87	\$0.69
2005	0	\$0	--
2006	0	\$0	--
2007-2009	21,039	\$7,498	\$0.36
2010-2011	192,301	\$38,869	\$0.20
2012	164,867	\$71,433	\$0.43
2013	5,249,686	\$1,113,725	\$0.21
2014	1,230,411	\$366,318	\$0.30
2015	2,108,337	\$527,238	\$0.25
2016	610,783	\$109,168	\$0.18
2017	2,202	\$2,799	\$1.27
2018	22,357	\$11,731	\$0.52
2019	60,522	\$40,260	\$0.67
2020	56,925	\$29,584	\$0.52
<b>2001-2020 avg.</b>	<b>600,749</b>	<b>\$138,753</b>	<b>\$0.51</b>



**Figure 2. Percent of commercial chub mackerel landings by statistical area, 2001-2020 as shown in federal VTR data. Data associated with fewer than three vessels and/or dealers are confidential. Confidential landings collectively account for about 1% of the total.<sup>23</sup>**

### *Recreational Fishery Trends*

MRIP data from Maine through North Carolina show increasing recreational catch and harvest of chub mackerel nearly year from 2015 through 2020 (Table 2). In 2020, an estimated nearly 200,000 chub mackerel were caught and 59,713 chub mackerel were harvested, corresponding to 73,983 pounds of harvested chub mackerel from Maine through North Carolina.<sup>24</sup>

The increasing recreational catch and harvest estimates in recent years could be due, at least in part, to improved reporting and improved differentiation between chub mackerel and other species which are similar in appearance, such as Atlantic mackerel. For example, in 2017 chub mackerel were added to the core list of species for trainings of MRIP field samplers from Maine through Virginia. In addition, the Council and partners at NMFS developed a small scombrid species identification guide and distributed over 3,700 copies to commercial and recreational permit holders and other interested stakeholders in 2019.<sup>25</sup>

MRIP data collection in 2020 was impacted by the COVID-19 pandemic. Specifically, the Access Point Angler Intercept Survey (APAIS), which serves as the basis for catch estimates in the shore based and private angler fishing modes, was suspended in all New England and Mid-Atlantic states in late March or April 2020 and resumed between May and August 2020, depending on the state. MRIP headboat sampling was also suspended in 2020 and has not yet resumed. NMFS used imputation methods to fill gaps in 2020 catch data with data collected in 2018 and 2019. These proxy data match the time, place, and fishing mode combinations that



would have been sampled had the APAIS continued uninterrupted. Proxy data were combined with observed data to produce catch estimates using the standard estimation methodology.

It is not likely that the increase in recreational chub mackerel catch and harvest in 2020 is due to the use of imputed data as the imputed data match the 2018 and 2019 data. Any change from 2018 and 2019 would be due to changes in effort data (which are collected through mail and telephone surveys that were largely unimpacted by the pandemic) or due to changes during the locations and times of year that did not require use of imputed data.

During 2016-2020, about 54% of the recreational chub mackerel harvest from Maine through North Carolina (in numbers of fish) was caught in state waters, with the remaining 46% caught in federal waters. The proportion of harvest by mode averaged 59% from private and rental boats, 34% from party and charter boats, and 7% from shore (Table 3). Most recreational catch and harvest occurred in New York, Rhode Island, New Jersey, and Connecticut (Table 4). Most catch and harvest occurred during July and August (Table 5).<sup>24</sup>

Through development of Amendment 21, the Council heard anecdotal descriptions of recreational chub mackerel harvest, including reports of catch on for-hire vessels out of New York and New Jersey. There have also been reports of chub mackerel harvest for use as live bait on recreational trips out of Maryland and Virginia targeting white marlin, blue marlin, sailfish, spearfish, yellowfin tuna, bigeye tuna, and/or wahoo. According to public comments, this live bait fishery occurs on the edges of certain offshore canyons, especially Norfolk Canyon, where chub mackerel and their predators are concentrated in the late summer and early fall.<sup>26</sup>

**Table 2. MRIP-estimated recreational catch and harvest of chub mackerel from Maine through North Carolina, 2001-2020.<sup>24</sup>**

<b>Year</b>	<b>Recreational catch (# of fish)</b>	<b>Recreational harvest (# of fish)</b>	<b>Recreational harvest (pounds)</b>	<b>% retained</b>
2001	821	0	0	0%
2002-2010	0	0	0	--
2011	1,613	1,613	355	100%
2012	15,569	0	0	0%
2013	0	0	0	--
2014	60,191	49,813	48,087	83%
2015	0	0	0	--
2016	2,575	2,087	2,093	81%
2017	26,061	13,310	14,831	51%
2018	157,471	104,830	128,949	67%
2019	139,282	49,892	74,462	36%
2020	199,919	125,757	149,578	63%
<b>2016-2020 Avg.</b>	<b>105,062</b>	<b>59,175</b>	<b>73,983</b>	<b>59%</b>

**Table 3. Chub mackerel harvest by recreational fishing mode in numbers of fish, 2001-2020, Maine through North Carolina.<sup>24</sup>**

<b>Year</b>	<b>Party/charter</b>	<b>Private/rental boat</b>	<b>Shore</b>
2001-2010	0	0	0
2011	0	0	1,613
2012-2013	0	0	0
2014	49,813	0	0
2015	0	0	0
2016	1,889	198	0
2017	2,422	10,888	0
2018	43,424	58,817	2,589
2019	17,149	32,743	0
2020	35,901	70,676	19,180
<b>2016-2020 Avg.</b>	<b>20,157 (34%)</b>	<b>34,664 (59%)</b>	<b>4,354 (7%)</b>

**Table 4. Proportion of total chub mackerel catch and harvest in numbers of fish by state, 2016-2020.<sup>24</sup>**

<b>State</b>	<b>Recreational catch</b>	<b>Recreational harvest</b>
<b>ME</b>	0%	0%
<b>NH</b>	4%	6%
<b>MA</b>	1%	0%
<b>RI</b>	21%	22%
<b>CT</b>	12%	10%
<b>NY</b>	46%	48%
<b>NJ</b>	16%	14%
<b>DE</b>	0%	0%
<b>MD</b>	0%	0%
<b>VA</b>	0%	0%
<b>NC</b>	0%	0%
<b>Total</b>	100%	100%

**Table 5. Proportion of total chub mackerel catch and harvest in numbers of fish by wave, Maine through North Carolina, 2016-2020. Note that only North Carolina conducts MRIP sampling during wave 1.<sup>24</sup>**

<b>Wave</b>	<b>Catch</b>	<b>Harvest</b>
<b>1 (Jan-Feb)</b>	0%	0%
<b>2 (Mar-Apr)</b>	0%	0%
<b>3 (May-Jun)</b>	4%	5%
<b>4 (Jul-Aug)</b>	60%	65%
<b>5 (Sep-Oct)</b>	36%	30%
<b>6 (Nov-Dec)</b>	0%	0%
<b>Total</b>	100%	100%

## References

- <sup>1</sup> Collette, B. B. and C. E. Nauen. 1983. FAO species catalogue. Vol. 2 Scombrids of the word: An annotated and illustrated catalogue of tunas, mackerels, bonitos, and related species known to date. Available at: <http://www.fao.org/docrep/009/ac478e/ac478e00.htm>
- <sup>2</sup> Perrotta, R. G., M. D. Viñas, D. R. Hernandez, and L. Tringali. 2001. Temperature conditions in the Argentine chub mackerel (*Scomber japonicus*) fishing ground: implications for fishery management. *Fisheries Oceanography*. 10(3):275-283.
- <sup>3</sup> Hernández, J. J. C. and A. T. S. Ortega. 2000. Synopsis of biological data on the chub mackerel (*Scomber japonicus* Houttuyn, 1782). FAO Fisheries Synopsis No. 157.
- <sup>4</sup> Castro, J. J. 1993. Feeding ecology of chub mackerel *Scomber japonicus* in the Canary Islands area. *South African Journal of Marine Science*. 13(1): 323-328.
- <sup>5</sup> Velasco, E. M., J. D. Arbol, J. Baro, and I. Sobrino. 2011. Age and growth of the Spanish chub mackerel *Scomber colias* off southern Spain: a comparison between samples from the NE Atlantic and the SW Mediterranean. *Revista de Biología Marina y Oceanografía*. 46(1):27-34.
- <sup>6</sup> Daley, T. T. and R. T. Leaf. 2019. Age and growth of Atlantic chub mackerel (*Scomber colias*) in the Northwest Atlantic. *Journal of Northwest Atlantic Fisheries Science*. 50: 1-12.
- <sup>7</sup> Carvalho, N., R. G. Perrotta, and E. Isidro. 2002. Age, growth and maturity in the chub mackerel (*Scomber japonicus* Houttuyn, 1782) from the Azores. *Arquipélago Life and Marine Sciences*. 19A: 93-99.
- <sup>8</sup> Houde, E. D., S. A. Berkeley, J. J. Klinovsky, and C.E. Dowd. 1976. Ichthyoplankton survey data report: summary of egg and larvae data used to determine abundance of clupeid fishes in the eastern Gulf of Mexico. University of Miami Sea Grant Technical Bulletin Number 32. Available at: <https://repository.library.noaa.gov/view/noaa/10888>  
Houde, E. D., J. C. Leak, C. E. Dowd, S. A. Berkeley, and W. J. Richards. 1979. Ichthyoplankton abundance and diversity in the eastern Gulf of Mexico - a report to the Bureau of Land Management prepared under contract number AA550-CT7-28. Available at: <https://www.boem.gov/ESPIS/3/4042.pdf>  
Berrien, P. L. 1978. Eggs and larvae of *Scomber scombrus* and *Scomber japonicus* in continental shelf waters between Massachusetts and Florida. *Fishery Bulletin*. 76(1):95-115.  
Richardson, D. E., J. K. Llopiz, C. M. Guignard, and R. K. Cowen. 2010. Larval assemblages of large and medium-sized pelagic species in the Straits of Florida. *Progress in Oceanography*. 86(2010):8-20.  
Southeast Area Monitoring and Assessment Program (SEAMAP) larval survey catches from 1983-2014.
- <sup>9</sup> Daley, T. 2018. Growth and reproduction of Atlantic chub mackerel (*Scomber colias*) in the Northwest Atlantic. Master's thesis. University of Southern Mississippi.
- <sup>10</sup> Castro, J. J. and A. S. Del Pino. 1995. Feeding preferences of *Scomber japonicus* in the Canary Islands area. *Scientia Marina*. 59(3-4):352-333.  
Sever, T. M., B. Bayhan, M. Bilecenoglu, and S. Mavili. 2006. Diet composition of the juvenile chub mackerel (*Scomber japonicus*) in the Aegean Sea (Izmir Bay, Turkey). *Journal of Applied Ichthyology*. 22(2006):145-148.
- <sup>11</sup> Paine, M. A., J. R. McDowell, and J. E. Graves. 2007. Specific identification of western Atlantic Ocean scombrids using mitochondrial DNA cytochrome C oxidase subunit I (COI) gene region sequences. *Bulletin of Marine Science*. 80(2):353-367.  
Personal communication with John Graves, Virginia Institute of Marine Science; Steve Poland, N.C. Division of Marine Fisheries, and Michelle Staudinger, University of Massachusetts Amherst.
- <sup>12</sup> Montevecchi, W. A. and Myers, R. A. 1997. Centurial and decadal oceanographic influences on changes in northern gannet populations and diets in the north-west Atlantic: implications for climate change. *ICES Journal of Marine Science*. 54: 608-614.

- Smith, L. A., J. S. Link, S. X. Cadrin, and D. L. Palka. 2015. Consumption by marine mammals on the Northeast U.S. continental shelf. *Ecological Applications*. 25(5):373-389.
- Staudinger, M.D., K. E. Mills, K. Stamieszkin, N. R. Record, C. A. Hudak, A. Allyn, A. Diamond, K. D. Friedland, W. Golet, Me. E. Henderson, C. M. Hernandez, T. G. Huntington, R. Ji, C. L. Johnson, D. S. Johnson, A. Jordaan, J. Kocik, Y. Li, M. Liebman, O. W. Nichols, D. Pendelton, R. A. Richards, T. Robben, A. C. Thomas, H. J. Walson, and K. Yakola. 2019. It's about time: a synthesis of changing phenology in the Gulf of Maine ecosystem. *Fisheries Oceanography*: 1-34. Available at: <https://doi.org/10.1111/fog.12429>
- Personal communication, Nancy Kohler, NEFSC.
- <sup>13</sup> Unmanaged Forage Omnibus Amendment. Available at: <http://www.mafmc.org/actions/unmanaged-forage>
- <sup>14</sup> Chub mackerel literature review available at: [http://www.mafmc.org/s/12\\_Chub\\_lit\\_review\\_July2018.pdf](http://www.mafmc.org/s/12_Chub_lit_review_July2018.pdf)
- <sup>15</sup> Manooch, C. S., D. L. Mason, and R. S. Nelson. 1984. Food and gastrointestinal parasites of dolphin *Coryphaena hippurus* collected along the southeastern and Gulf Coasts of the United States. *Bulletin of the Japanese Society of Scientific Fisheries*. 50(9):1151-1525.
- <sup>16</sup> Veiga, P., J. C. Xavier, C. A. Assis, and K. Erzini. 2011. Diet of the blue marlin, *Makaira nigricans*, off the south coast of Portugal. *Marine Biology Research*. 7:820-825.
- <sup>17</sup> Abitia-Cardenas, L. A., F. Galvan-Magaña, F. J. Gutierrez-Sanches, J. Rodriguez-Romero, B. Aguilar-Palomino, and A. Moehl-Hitz. 1999. Diet of blue marlin *Makaira mazara* off the coast of Cabo San Lucas, Baja California Sur, Mexico. *Fisheries Research*. 44(1999):95-100.
- <sup>18</sup> Alonso, H, J. P. Granadeiro, V. H. Paiva, A. S. Dias, J. A. Ramos, and P. Catry. 2012. Parent-offspring dietary segregation of Cory's shearwaters breeding in contrasting environments. *Marine Biology*. 159 (2012): 1197-1207.
- Alonso, H, J. P. Granadeiro, M. P. Dias, T. Catry, and P. Catry. 2018. Fine-scale tracking and diet information of a marine predator reveals the origin and contrasting spatial distribution of prey. *Progress in Oceanography*. 162 (2018): 1-12.
- Ambrose, S. T, P. W. Froneman, M. J. Smale, G. Cliff, and S. Plön. 2013. Winter diet shift of long-beaked common dolphins (*Delphinus capensis*) feeding in the sardine run off KwaZulu-Natal, South Africa. *Marine Biology*. 160 (2013): 1543-1561.
- Granaderio, J. P., L. R. Monterio, and R. W. Furness. 1998. Diet and feeding ecology of Cory's shearwater *Calonectris diomedea* in the Azores, north-east Atlantic. *Marine Ecology Progress Series*. 166 (1998): 267-276.
- Marçalo, A., L. Nicolau, J. Giménez, M. Ferreira, J. Santos, H. Araújo, A. Silva, J. Vingada, and G. J. Pierce. 2018. Feeding ecology of the common dolphin (*Delphinus delphis*) in western Iberian waters: has the decline in sardine (*Sardina pilchardus*) affected dolphin diet? *Marine Biology*. 165 (2018): 44.
- <sup>19</sup> Report of the July 2018 SSC meeting. Available at: <http://www.mafmc.org/ssc>
- <sup>20</sup> Goode, G. B. 1884. The food fishes of the U.S. part 3: natural history of useful aquatic animals. In: *The Fisheries and Fishery Industries of the United States*. U.S. Government Printing Office. Washington, D.C. Available at: <http://celebrating200years.noaa.gov/rarebooks/fisheries/welcome.html>
- <sup>21</sup> More information on the Chub Mackerel Amendment (Amendment 21 to the Mackerel, Squid, and Butterfish Fishery Management Plan) is available at: <https://www.mafmc.org/actions/chub-mackerel-amendment>.
- <sup>22</sup> Unpublished NMFS commercial fish dealer data (i.e., "DERS"), which include both state and federal dealer data).
- <sup>23</sup> Data from commercial vessel trip reports submitted to the NMFS Greater Atlantic Regional Fisheries Office.
- <sup>24</sup> Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division. Accessed August 12, 2021. Available at: <https://www.st.nmfs.noaa.gov/recreational-fisheries/data-and-documentation/queries/index>

- <sup>25</sup> Digital copies of the small scombrid ID guide are available at: <https://www.mafmc.org/actions/chub-mackerel-amendment> (scroll down to “Related Resources”). Waterproof hard copies may be obtained by contacting Council staff at 302-674-2331 or [contact@mafmc.org](mailto:contact@mafmc.org).
- <sup>26</sup> Summary of November 9, 2017 webinar on chub mackerel in HMS diets. Available at: <http://www.mafmc.org/actions/chub-mackerel-amendment>



## Mid-Atlantic Fishery Management Council

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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

# MEMORANDUM

**Date:** September 23, 2021  
**To:** Chris Moore, Executive Director  
**From:** Staff  
**Subject:** Atlantic Mackerel Rebuilding v2.0 Framework Update and Options/  
Recommendations

Guidance from NMFS suggests that a reasonable timeline for final action on the second Atlantic mackerel rebuilding plan will be to take final action in April 2022 with implementation by January 1, 2023. Given the long-term perspective recommended by the SSC, the Council is considering 10-year rebuilding options with several rebuilding probabilities. A 10-year rebuilding plan as previously selected by the Council would thus cover from 2023-2032. 2022 will be addressed with emergency or interim action based on the Council's earlier request, though NMFS has substantial discretion for what they implement for 2022. If Canadian landings stay near 4,000 MT, staff anticipates that coastwide catch will remain below the 15,512 MT recommended by the Council for both 2021 and 2022. Given earlier Council actions, staff will assume (unless directed otherwise) that when the last set of projections are run before action, the Council would like recent/current catch assumptions to be based on the information available at that time.

The Scientific and Statistical Committee (SSC) meets in March 2022, so it can provide ABCs associated with various rebuilding options before the April 2022 Council meeting. The outstanding recruitment assumption question has been resolved for the time being by the SSC, with the advice being to use either just lower short-term recruitment, or use lower short-term recruitment until the stock is above half of the rebuilding target (and then revert to typical long term recruitment). While there is no accepted stock-recruitment relationship, observations and analyses at the SSC meeting suggested that lower recruitment is most likely when below half of the rebuilding target. If recruitment does not return to a typical scenario in a few years, SSB will not grow/rebuild as projected in options 2-5. Under all options, according to the latest assessment, coastwide catches at 100% of the biomass target (i.e. rebuilt) with the standard P\* risk policy are anticipated to be about 30,000 metric tons (MT) (coastwide) (assuming 150% C.V.). Based on the SSC's advice and previous input from the Council, staff recommends moving forward with four rebuilding options to address the range evaluation requirements of NEPA:

1. Assume persistent lower recruitment (i.e. 2009+) throughout a 10-year rebuilding period, and seek to limit catches accordingly. To rebuild in 10 years with a 50% probability, 2023 catches (coastwide) would need to be limited to about 600 metric tons (MT) and would increase to about 1,700 MT by 2032 if all goes according to plan. Canadian landings alone would likely lead to not

achieving rebuilding in 10 years if this lower recruitment persists. Fishing mortality would need to equal 0.01. While this may not be practicable, leaving one alternative in the options that assumes only lower recruitment is useful as an indicator of the importance of recruitment for rebuilding and providing contrast with other options.

2. Assume persistent lower recruitment until  $\frac{1}{2}$  of the rebuilding target is reached (in several years) followed by typical (1975+) recruitment and calculate catches with the Council's standard P\* risk policy. While not yet precisely calculated, rebuilding (with a 50% probability) would be anticipated in about 6-8 years. Catches (coastwide) would start about 4,000 MT and increase as biomass increases if all goes according to plan. Fishing mortality varies per the Council's risk policy, but would start very low due to the buffering required by the risk policy at low stock sizes.

3. Assume persistent lower recruitment until  $\frac{1}{2}$  of the rebuilding target is reached (in several years) followed by typical (1975+) recruitment through the remainder of a 10-year rebuilding period, and seek to limit catches accordingly. To rebuild in 10 years with a 60% probability, 2023 catches (coastwide) would need to be limited to about 7,000 MT and would increase to about 18,500 MT by 2032 if all goes according to plan. Fishing mortality would need to equal about 0.11. NOTE: These values are Council staff approximations based on other scenarios run by Center staff. As with the initial rebuilding plan, this option would have to be designated as superseding the standard risk policy if it results in higher catches than the standard risk policy.

4. Assume persistent lower recruitment until  $\frac{1}{2}$  of the rebuilding target is reached (in several years) followed by typical (1975+) recruitment through the remainder of a 10-year rebuilding period, and seek to limit catches accordingly. To rebuild in 10 years with a 50% probability, 2023 catches (coastwide) would need to be limited to about 8,600 MT and would increase to about 22,000 MT by 2032 if all goes according to plan. Fishing mortality would need to equal 0.14. As with the initial rebuilding plan, this option would have to be designated as superseding the standard risk policy if it results in higher catches than the standard risk policy.

Relative to the Council's previous motions and the four above suggested alternatives, staff suggests moving several options to a "Considered but Rejected" designation, including:

Given the extremely low catches (no U.S. harvest allowed for 10 years) required for even a 50% probability of rebuilding when lower recruitment is assumed for the whole rebuilding period (i.e. #1 above), 60% and 75% probability options combined with the low recruitment appear redundant. Assuming low recruitment for even a part of the timeline is itself more precautionary than the initial rebuilding plan, and including even lower catch time series than #1 above seems unwarranted. A standard P\* approach combined with assuming lower recruitment for the whole time period is similarly redundant. These options would be listed in a "Considered but Rejected" section.

Taking a P\*-like deduction from a rebuilding catch (i.e. treating a rebuilding catch like a typical OFL that gets buffered) is redundant given the Council would already be considering and choosing from discrete rebuilding probabilities (e.g. 50% or 60%). For reference, catches would start around 2,500 MT if a P\*-like deduction was taken from the rebuilding catches associated with a 50% probability of rebuilding in ten years (i.e. taking a P\*-like buffer from #4 above). This option would also be listed in a "Considered but Rejected" section.

Even with the two phase recruitment scenario, achieving a 75% probability of rebuilding would require very low catches. Catches would start around 3,000 MT in 2023 and end around 11,000 MT in 2032. Given Canadian catches alone are expected to be at least 4,000 MT per year even initially, and it may be impossible to drastically restrict recreational catches, this option appears impracticable and would also be listed in a “Considered but Rejected” section.

If the Council endorses these above four general rebuilding options, then Council staff will work with Center staff to develop the exact time series of catches and predicted biomass trajectories. Council staff will also work with GARFO staff to build in management measures to accompany these scenarios as currently used and/or as previously directed by the Council and Mackerel, Squid, and Butterfish Committee, including:

- Commercial closure and trip limit options that are commensurate with the quotas resulting from the above four rebuilding options.
- A 3.0 inch minimum mesh requirement to retain more than 5,000 pounds of Atlantic mackerel (to mimic the butterfish regulations)
- River Herring and Shad Caps that either adjust to the potential quota in each year or use a floor of 129 MT (i.e. the current cap)
- Recreational measures including annual and seasonal Atlantic mackerel closures of federal waters to harvest/possession of Atlantic mackerel and/or a 10-inch Atlantic mackerel minimum size limit.

Note: Given the unknown discard mortality, and likely enforcement issues related to chub mackerel mis-identification, staff recommends moving the minimum size option to “Considered but Rejected.” Identification issues could still be an issue with closures, but at least there’s a clearer conservation benefit.

Council staff has flagged to several relevant states that additional restrictions on Atlantic mackerel fishing are likely pending. Given the potential of substantial additional reductions for the commercial sector, and that most recreational Atlantic mackerel harvest occurs in state waters, staff recommends that the Council request that all states with consistent and substantial recreational Atlantic mackerel landings (Massachusetts, New Hampshire, and Maine) take measures to reduce recreational catch in state waters by approximately 50% in 2022. Since catch mostly starts after May 1, there should be time for the relevant states to consider measures for 2022.

In 2018-2020 most recreational Atlantic mackerel catch was in the form of MRIP “B1” reported (not observed) harvest. This suggests to staff that a substantial portion of mackerel harvest is for bait, and staff’s understanding is that mackerel are often used for striped bass and highly migratory species (HMS) bait. To the extent that Atlantic mackerel are caught in state waters and then taken offshore for HMS bait, then there could be some indirect state waters catch reduction (and impact on HMS fishing) from a possession prohibition in federal waters. Offering a briefing to the NMFS HMS Advisory Panel at its next meeting seems warranted to explore this issue.





**Mid-Atlantic Fishery Management Council**

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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

**MEMORANDUM**

**Date:** September 23, 2021  
**To:** Chris Moore, Executive Director  
**From:** Staff  
**Subject:** Spiny Dogfish Specifications

The Spiny Dogfish Monitoring Committee (SDMC) endorsed status quo 2022 specifications and discussed various issues regarding a potential trip limit change (see SDMC summary). NMFS may provide additional information during the Spiny Dogfish Committee meeting that warrants a reconsideration, but given the available information, staff observes/recommends the following:

1. Based on discussion at the Monitoring Committee, an emergency action request to change the trip limit seems likely to be declined by NMFS given trip limit issues have been an ongoing consideration.
2. The last two trip limit changes made via the specifications process were increases of 25% and then 20%. Increases around this range, i.e. up to 7,500 pounds, seem reasonable to continue to consider within the specifications process. The use of a Supplemental Environmental Assessment (EA) that focuses just on trip limit changes would lessen workload issues. However, there may still be substantial protected resource concerns to address and implementation would not be expected until May 1.
3. A separate framework action could facilitate public awareness and participation given that the fishery is in the middle of static multi-year specifications and some fishery participants may not be expecting consideration of trip limit changes at this time. Because spiny dogfish are jointly managed with the NEFMC, a framework would be on both Council’s agendas twice. A separate framework action could likely still utilize a Supplemental EA that focuses on the trip limit issue, but implementation would likely be later than using specifications given the required meeting sequence.

Due to the short term uncertainty created by the pending research track assessment and limited input about policy preferences across the fishery, staff recommends status-quo measures to maintain stability. Staff has no sense yet of the outcome of the assessment, which will be considering substantially different models.

Other included briefing materials are the Monitoring Committee Summary, the SSC Report (separate tab), the staff memo to the SSC, the Advisory Panel Fishery Performance Report, and the staff Fishery Information Document.





## Spiny Dogfish Monitoring Committee (SDMC) Meeting Summary

September 22, 2021

*Webinar*

The Mid-Atlantic Fishery Management Council's (Council) Spiny Dogfish Monitoring Committee (SDMC) met on September 20, 2021 at 1:30 pm. The purpose of this meeting was to review spiny dogfish management and make any appropriate recommendations.

**SDMC Attendees: Jason Didden, Scott MacDonald (Mid-Atlantic industry ex-officio member), Nichola Meserve, Conor McManus, Cynthia Ferrio, John Whiteside (New England industry ex-officio member), Kathy Sosebee, Angel Willey, David Behringer**

**Other Attendees: Alan Bianchi, James Fletcher, Hannah Novotny**

Jason Didden summarized recent fishery performance, the input of the Advisory Panel, and the findings of the Scientific and Statistical Committee (SSC). The SSC did not recommend any changes to the spiny dogfish Acceptable Biological Catch (ABC), and no changes to specifications were deemed warranted by the SDMC.

Jason Didden also described a price analysis conducted to examine if there was any indication of substantial effects or disruption of fishery operations after the two most recent trip limit increases. This analysis (contained in the Fishery Information Document) was undertaken by staff following a Council tasking to better inform consideration of a potential trip limit increase. These prior increases occurred on September 8, 2014 (4,000 pounds to 5,000 pounds and August 15, 2016 (5,000 pounds to 6,000 pounds). The changes went into effect through the normal specifications rulemaking process each with an accompanying Environmental Assessment (EA), though implementation occurred later in each respective fishing year due to Council processes.<sup>1</sup> The analysis of prices around the times of those trip limit changes did not suggest substantial effects.

The industry ex-officio members proposed that a doubling of the trip limit to 12,000 pounds be implemented via an emergency action to help provide additional incentive to the current fleet to harvest more dogfish (i.e. return to the somewhat higher levels seen in recent years). The emergency rationale is primarily related to declining participation/landings and potential loss of markets leading to long-term missed economic opportunities. Per the Advisory Panel Report, recent trends appear to be due to increased fuel costs and better opportunities in other/new

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<sup>1</sup> For 2014's 4,000 to 5,000 lb increase: MAFMC recommended 4,000 lb in October 2013, revisited in December 2013 without changing, and NEFMC recommended no limit in January 2014. NMFS proposed no trip limit in May 2014 (for sake of maximum public comment) and issued a final rule in August 2014 for the 5000 lb limit. For 2016's 5,000 to 6,000 lb increase: MAFMC recommended 5000 lb in October 2015, as did NEFMC in December 2015. In April 2016, both Councils voted to revise to 6,000 lb based on a request from ASMFC (vote taken February 2016). In June 2016, NMFS proposed 5,000 lb, but the final rule in August 2016 implemented the 6,000 lb limit.

fisheries rather than Covid impacts or declining resource availability. There was substantial discussion about the potential for emergency action including the criteria and available resources to complete accompanying NEPA analyses and rulemaking. NMFS will provide additional guidance on potential emergency rulemaking at the Committee meeting.

The SDMC noted that as long as the states are adhering to their quotas based on the overall ABC/ACL, different trip limits should not lead to ACL overages or negatively affect stock size. From a process perspective, substantial changes are more appropriate for frameworks or amendments where more analysis and public comment can be evaluated, though it can be challenging to determine a trigger point necessitating a particular type of action. NMFS will likely have additional input on potential process considerations at the upcoming Committee meeting, including as related to joint-management requirements. Regardless of the Council approach (framework, specifications, emergency action request), an Environmental Assessment (EA) would likely be appropriate from a National Environmental Policy Act (NEPA) perspective to accompany any potential trip limit increase given heightened large whale concerns and the potential for a higher trip limit to lead to additional effort and/or additional time of gear in the water compared to the current situation. Council staff noted that creating an EA for spiny dogfish is not included in the Council's 2021 work plan, but the Council could prioritize such work for 2022 (or re-prioritize 2021 resources).

The SDMC also noted that a research track assessment is in development that will hopefully bring new tools to the assessment of the spiny dogfish stock. The peer review for the assessment is scheduled for July 2022.

There was public comment from James Fletcher asking when provisions for an industrial fishery would be considered. J. Fletcher also noted that whale issues could be addressed by moving from fixed gear to mobile gear.

The SSC Report is  
behind the  
Committee  
Reports Tab.





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Christopher M. Moore, Ph.D., Executive Director

## MEMORANDUM

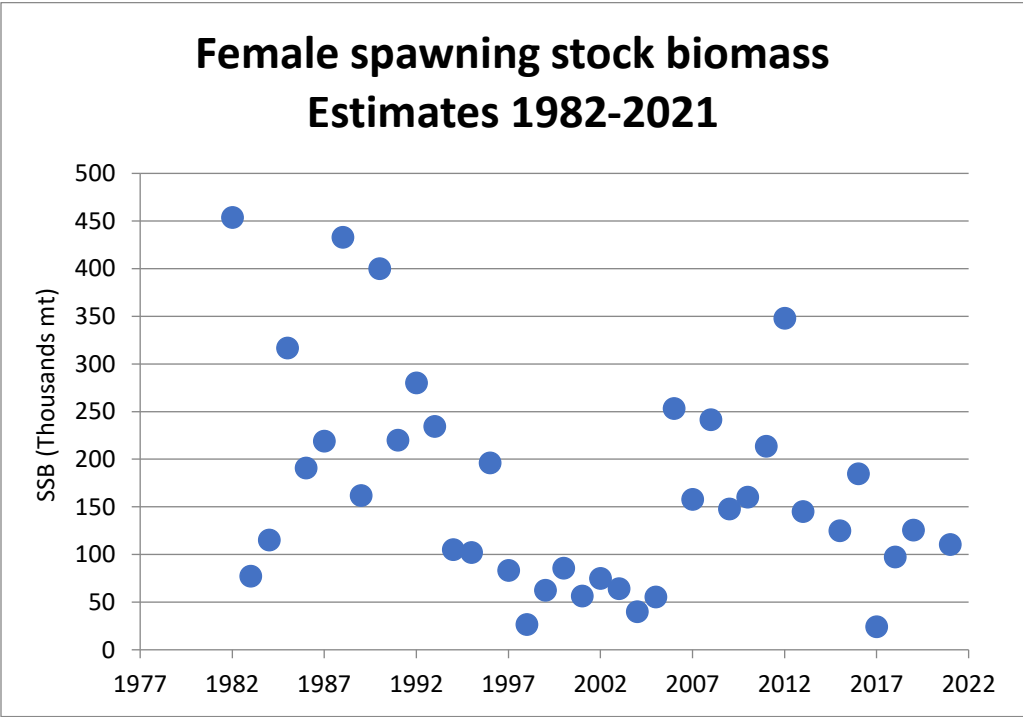
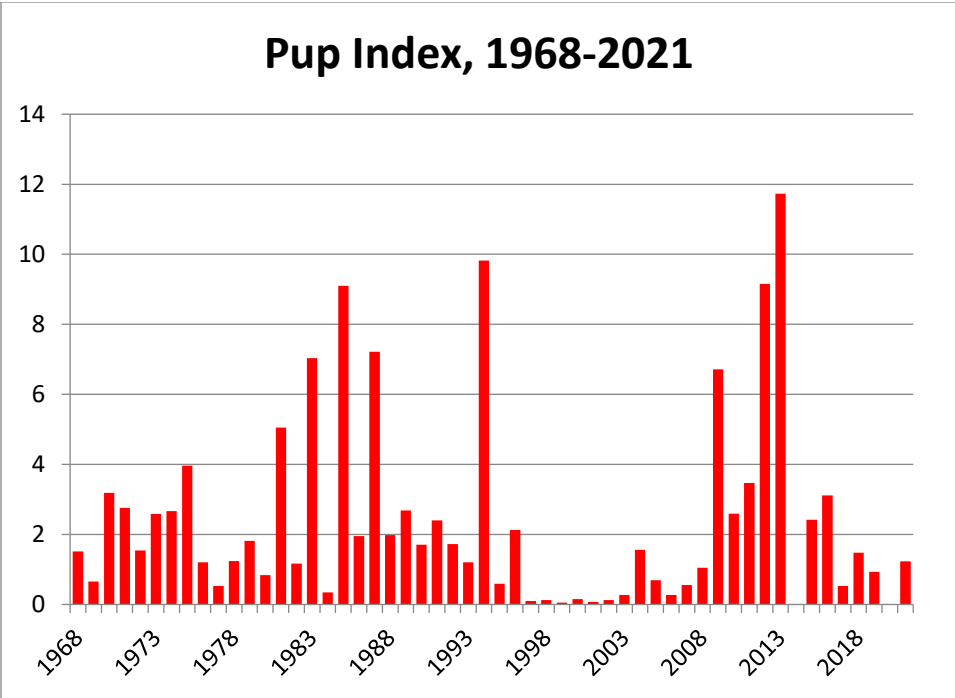
**Date:** August 30, 2021  
**To:** Chris Moore, Executive Director  
**From:** Jason Didden, Staff  
**Subject:** Spiny Dogfish Acceptable Biological Catch (ABC)

The spiny dogfish fishery is in multi-year specifications for the 2021-2022 fishing years with an ABC of 17,498 metric tons. The Council's Scientific and Statistical Committee (SSC) is scheduled to review the 2022 dogfish ABC during its September 2021 meeting.

Given the recently-commenced research track assessment and management track assessment scheduling, NMFS' Northeast Fisheries Science Center (NEFSC) did not produce any specific documents for spiny dogfish for this meeting. However, the results of the 2021 NEFSC spring trawl survey for pups and female spawning stock biomass are attached below. Also, updated landings are available in the fishery information document, which has been posted to the SSC meeting page, along with the Advisory Panel's Fishery Performance Report.

Staff has some concern about this fishery. Both landings and trawl survey results have been trending down since the post-FMP peaks in 2012. Prices declined substantially from 2012 to 2013 but have been trending up since 2013. The 2021 spring survey results were nearly evenly divided between the two preceding data points (2018/2019) for both pups and biomass. However, the 2021 spring survey missed four strata south of Virginia representing about 2.7% of the total area surveyed (K. Sosebee pers. comm.). No adjustments were made for the missing area with the current data, but previous discussions have highlighted that Mid-Atlantic strata are important for spiny dogfish during the spring survey.

Given that the 2021 survey data point is about midway between the preceding two data points, staff recommends maintaining the previously-recommended ABC.







## **Spiny Dogfish AP Fishery Performance Report August 2021**

The Mid-Atlantic Fishery Management Council's (Council) Spiny Dogfish Advisory Panel (AP) met via webinar on August 19, 2021 to review the Spiny Dogfish Fishery Information Document and develop the following Fishery Performance Report. The primary purpose of this report is to contextualize catch histories for the Scientific and Statistical Committee (SSC) by providing information about fishing effort, market trends, environmental changes, and other factors. Trigger questions (see below) were posed to the AP to generate discussion of observations in the spiny dogfish fishery. Advisor comments described below are not necessarily consensus or majority statements.

**Advisory Panel members attending:** Scott MacDonald, John Whiteside, Jr., Jeremy Hancher, James Fletcher, Scott Curatolo-Wagemann, and Roger Rulifson. **Others attending:** Jason Didden, Daniel Salerno, Chris Batsavage, Alan Bianchi, Angel Willey, Willow Patten, John Almeida, Kirby Rootes-Murdy, Sonny Gwin, and Stephanie Sykes.

### **Trigger questions:**

The AP was presented with the following trigger questions:

1. What factors have influenced recent catch (markets/economy, environment, regulations, other factors)?
2. Are the current fishery regulations appropriate? How could they be improved?
3. What would you recommend as research priorities?
4. What else is important for the Council to know?

### **Market/Economic Conditions**

COVID-19 has not had a large impact to date. Similar market issues persist as with previous years – demand has been low but stable recently – market could support more landings than in most recent year if participation/production at the vessel level increases.

Changing the name to Chip Fish would help with marketing/exports. We could sell these in the U.S. if we could change the name (like snakehead). No advisors were opposed but practical challenges were highlighted.

There are no Southern processors – they were “burnt” by previous management and won’t get back in without quota stability on a decadal timeframe. They would need to know that the quota won’t go down for 5-10 years. Southern fishermen have to ship to MA.

Previous reports have noted not having a processor also depresses NY landings.

Developing industrial markets, be it fertilizer, processed export, or pharmaceutical (livers), requires a higher trip limit for trawlers.

Expanding use of liver components could increase overall value – several outreach efforts have occurred to pharmaceutical companies with no interest expressed back.

Regarding the fin market – there are self-imposed bans by cargo lines than prohibit fin transport even from sustainable sources (i.e. this is beyond our control).

General reasons for reduced participation: Increased fuel costs and opportunities in other fisheries.

In VA, fishermen have calculated that other fisheries (oysters, shrimp) are better opportunities and have reduced spiny dogfish effort. Shrimping drew off 8 boats last year.

The lowering of the quota from 38 million to 20 million had a negative impact on landings – would have been better to have taken an averaged approach.

Cornell has continued efforts to expand domestic consumption of spiny dogfish and other “exotic” species. E.g. chefs sampler events, underserved communities/foodbanks.

Public: Stephanie Sykes - One MA buyer had stipulations around having to land both skate and dogfish for a portion of the season, so if fishermen were unable to land both species they were forced to take days off or find another buyer.

## **Environmental Conditions**

Environmental conditions are always a factor.

Public: Stephanie Sykes – Early in summer 2021 Cape Cod fishermen had trouble finding dogfish and switched over to other fisheries (hook/tub-trawl and gillnet). Dogfish came inshore and some shifted to dogfish with steady landings. When buyers stopped buying mackerel more shifted back to dogfish. Catches really dropped in mid-August, seem to be improving currently. Water temperatures are particularly warm – dogfish are not coming up cold currently.

In VA weather (late January through March 2021) further reduced catches for remaining vessels.

## **Management Issues**

Regulations (especially the trip limit) do not allow a male fishery. State regulations do not allow new fishermen to participate. The current regulations are geared to keep price up and production limited and do not allow industrial production.

Raising the trip limit to 10,000 pounds could entice more vessels to participate and allow higher landings once dogfish are located. Vessels won’t immediately all land 10,000 pounds but helps with flexibility.

## **Other Issues**

Given the lack of an off-shelf survey and vertical water column usage by dogfish, we don’t really know the population size. See Carlson AE, Hoffmayer ER, Tribuzio CA, Sulikowski

JA (2014) The Use of Satellite Tags to Redefine Movement Patterns of Spiny Dogfish (*Squalus acanthias*) along the U.S. East Coast: Implications for Fisheries Management. PLoS ONE 9(7): e103384. <https://doi.org/10.1371/journal.pone.0103384>. The general biological section of the fishery information document should be updated accordingly. Also see Garry Wright's thesis that concluded that the NEFSC trawl survey is not accurately representing spiny dogfish biomass.

Allowing dogfish populations to increase has hurt all other fish populations. We need calculations regarding consumption by dogfish of other fish.

You should note the continual nature of embryo development/pupping in the general biological information section.

The repeated failure of the Bigelow since 2014 to complete its mission in terms of not fishing at a consistent time and not achieving planned stations eliminates our ability to have good information about spiny dogfish abundance given the dependence on the survey for spiny dogfish. This compounds uncertainty concerns and the Bigelow performance degrades the credibility of the resulting information (individual years and interpreting the time series). We have 1/8 years of full surveys in recent years. This affects all species' management. The Council should call in NEFSC maritime operations manager (D. Simon?) to account for Bigelow performance. The advisors agreed that the Bigelow performance issues are doing a disservice to all the fisheries and fishermen.

There is concern whether the NEFSC is continuing wire/net measurements to ensure survey consistency. The timing of the survey is critical for spiny dogfish due to the observed migration patterns and not sampling the same areas consistently reduces the meaningfulness of the resulting data.

Condition of NC inlets makes it very difficult to get product into NC. NC trawl fishermen can't land spiny dogfish in VA due to state regulations.

### **Research Priorities**

To add fishery value, we should research the value and production of squalamine in spiny dogfish livers for medical use.

The assessment needs to account for the continual pup production observed in females, which is primarily affected by food availability/consumption.

We should conduct research into the purposes of the horn/spine – is it offensive (weakening potential prey), or defensive?

Off the shelf sampling needs to occur to understand biomass. Why can't Bigelow do some deeper sampling? Could we send a drone to monitor?

East Carolina Univ has tagged 43,000 + spiny dogfish – trying to get graduate student to publish. Appears to be an availability gap from years 2-8/10 where if not caught in first few years fish are not caught for a number of years but then eventually show back up in commercial catches.





## Spiny Dogfish Fishery Information Document

August 2021

This Fishery Information Document provides an overview of the biology, stock condition, management system, and fishery performance for spiny dogfish (*Squalus acanthias*) with an emphasis on recent data. Data sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit <http://www.mafmc.org/dogfish>.

### Key Facts

- 2020 fishing year landings were about 12.8 million pounds; 2019 fishing year landings were about 19.1 million pounds.
- The current 2021 fishing year quota is 29.6 million pounds.
- The 2022 fishing year quota is planned to stay the same if no changes are recommended by the Scientific and Statistical Committee (SSC) or the Councils.
- A formal update from the NMFS Science Center is not anticipated, but we expect an update of the spring trawl survey results and pup index through 2021. The previous data update is available at [https://www.mafmc.org/s/3\\_2019-Data-Update-for-spiny-dogfish.pdf](https://www.mafmc.org/s/3_2019-Data-Update-for-spiny-dogfish.pdf).

### Basic Biology

Spiny dogfish is a coastal shark with populations on the continental shelves of northern and southern temperate zones throughout the world. It is the most abundant shark in the western north Atlantic and ranges from Labrador to Florida, but is most abundant from Nova Scotia to Cape Hatteras, North Carolina. Its major migrations on the northwest Atlantic shelf are north and south, but it also migrates inshore and offshore seasonally in response to changes in water temperature. Spiny dogfish have a long life, late maturation, a long gestation period, and relatively low fecundity, making them generally vulnerable to depletion. Fish, squid, and ctenophores dominate the stomach contents of spiny dogfish collected during the Northeast Fisheries Science Center (NEFSC) bottom trawl surveys, but spiny dogfish are opportunistic and have been found to consume a wide variety of prey. More detailed life history information can be found in the essential fish habitat (EFH) source document for spiny dogfish at: <https://www.fisheries.noaa.gov/region/new-england-mid-atlantic#science>.<sup>1</sup>

## Status of the Stock

Based on the current biomass reference point and an assessment update considering data through spring of 2018 (available at <http://www.mafmc.org/ssc-meetings/2018/sept-11>), the spiny dogfish stock is not overfished or experiencing overfishing. The 2018 biomass was 67% of the target. Fishing mortality in 2017, the most recent year available, was 83% of the overfishing threshold. A research track assessment has begun and is scheduled for review in 2022. The spiny dogfish spawning stock biomass estimate timeseries is provided in Figure 1.<sup>2</sup> Updated trawl data, which is the chief determinant of biomass in the assessment, will be distributed when available.

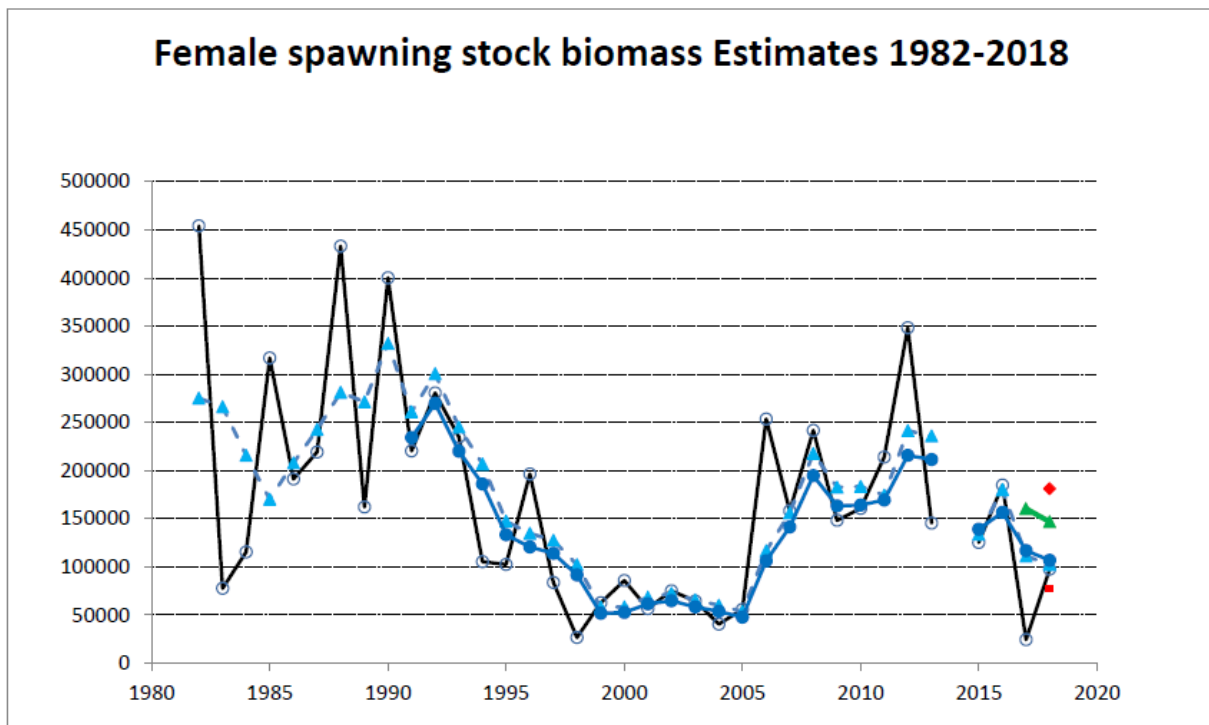


Figure 1. Stochastic SSB estimates for 1991 to 2018. Year refers to the terminal year in the three point moving average. The open circles are the yearly swept area SSB estimates, the blue triangles are the 3-year moving average of the swept area estimates, and the **closed blue circles are the stochastic SSB estimates**. The green triangles are the stochastic estimates not including 2017 and not adjusted with a Kalman filter, and the red diamond (no 2017) and square (with 2017) are the stochastic estimates adjusted with a Kalman filter (not used in last update).<sup>2</sup>

## **Management System and Fishery Performance**

### *Management*

The Council established management of spiny dogfish in 2000 and the management unit includes all federal East Coast waters.

Access to the fishery is not limited, but a federal permit must be obtained to fish in federal waters and there are various permit conditions (e.g. trip limit and reporting). There is a federal trip limit of 6,000 pounds. Some states mirror the federal trip limit, but states can set their own trip limits. The annual quota has been allocated to state shares through the Atlantic States Marine Fisheries Commission (<http://www.asmfc.org/species/spiny-dogfish>).

Spiny Dogfish three-year specifications were adopted by the Council in October 2018 for May 1, 2019 through April 30, 2022 (the 2019-2021 fishing years). Quotas were adjusted to the current 29.6 million pounds for the 2021 fishing year after an adjustment to the Council's risk policy and are planned to remain there since a 2022 research track assessment should be able to project catches for specifications starting with the 2023 fishing year.

Recreational landings are a minimal component of fishing mortality, and dead recreational discards comprise a relatively low portion of discard mortality.

### *Commercial Fishery*

Figure 2 and Table 1 illustrate spiny dogfish landings for the 2000-2020 fishing years relative to the quotas in those years. Additional years' landings are available in the 2019 NMFS Science Center data update. The Advisory Panel has previously noted that the fishery is subject to strong market constraints given weak demand.

Figure 3 provides inflation-adjusted spiny dogfish ex-vessel prices in "real" 2019 dollars.

Figure 4 illustrates preliminary landings from the 2021 and 2020 fishing years relative to the current quota. The last 2021/blue data point is typically the most incomplete.

Tables 2-4 provide information on landings in the 2018-2020 fishing years by state, month, and gear type.

Table 5 provides information on the numbers of participating vessels that have at least one federal permit. State-only vessels are not included, but the table should still illustrate trends in participation.

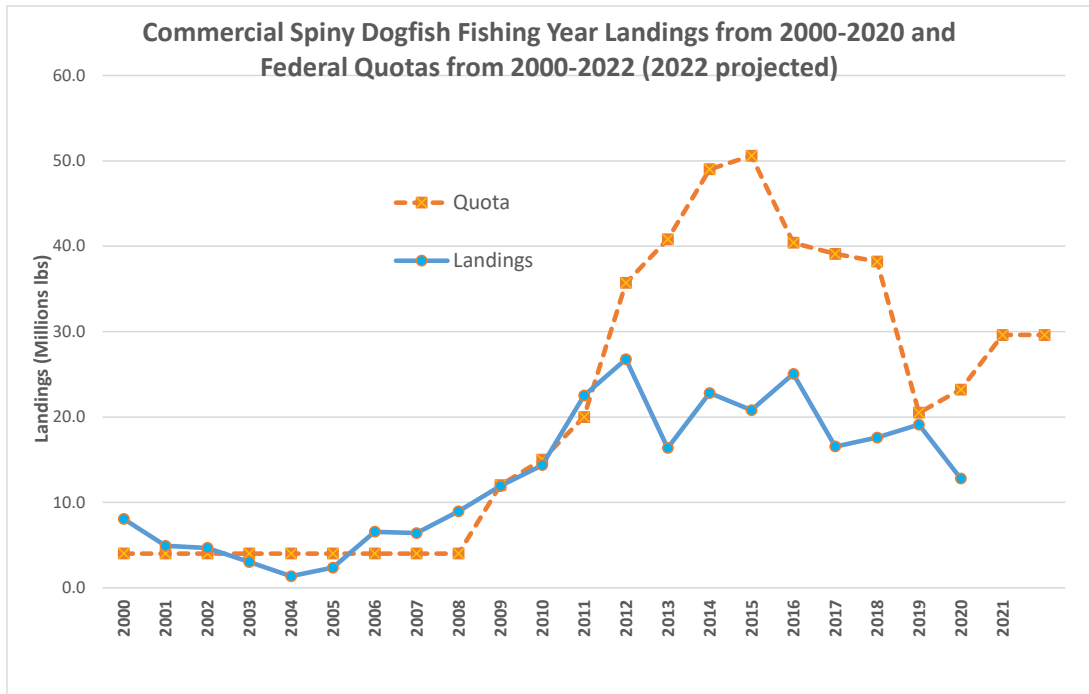


Figure 2. Annual spiny dogfish landings and federal quotas since 2000. <sup>4</sup>

Table 1. Commercial spiny dogfish fishing year landings from 2000-2020 and federal quotas from 2000-2022 (2022 Proposed)<sup>4</sup>

Fishing year	Fed Quota (M lb)	Landings (M lb)
2000	4.0	8.1
2001	4.0	4.9
2002	4.0	4.7
2003	4.0	3.0
2004	4.0	1.3
2005	4.0	2.3
2006	4.0	6.6
2007	4.0	6.4
2008	4.0	8.9
2009	12.0	11.9
2010	15.0	14.4
2011	20.0	22.5
2012	35.7	26.8
2013	40.8	16.4
2014	49.0	22.8
2015	50.6	20.8
2016	40.4	25.0
2017	39.1	16.5
2018	38.2	17.6
2019	20.5	19.1
2020	23.2	12.8
2021	29.6	
2022	29.6	



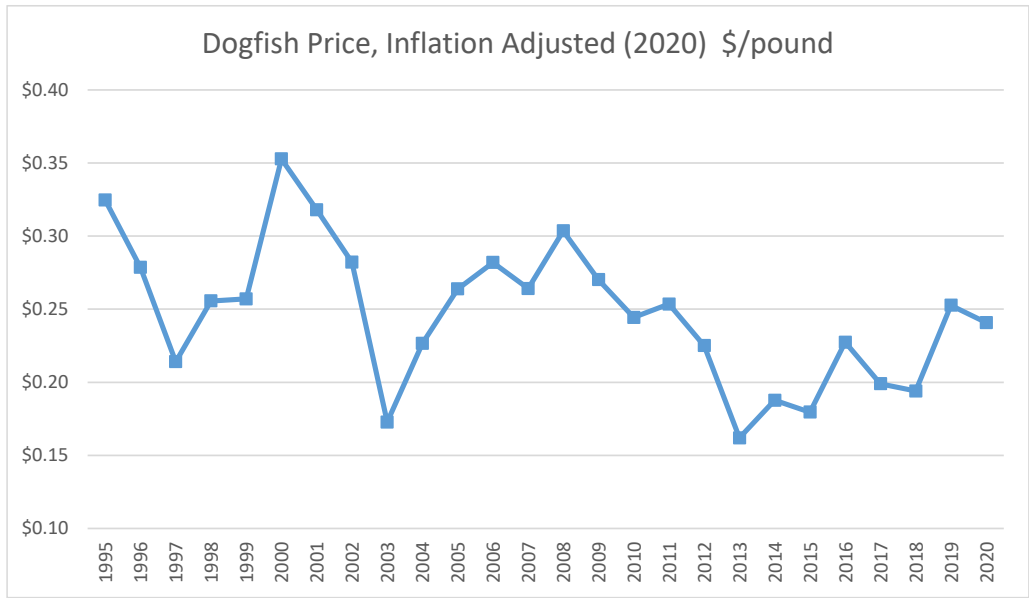


Figure 3. Price of spiny dogfish (\$/live pound) (adjusted to 2020 “real” dollars using the GDP deflator, 1995-2020 fishing years. Given the difference between fishing year and the calendar year used for inflation adjusting, adjusted prices are approximate. Source: NMFS unpublished dealer data. <sup>4</sup>

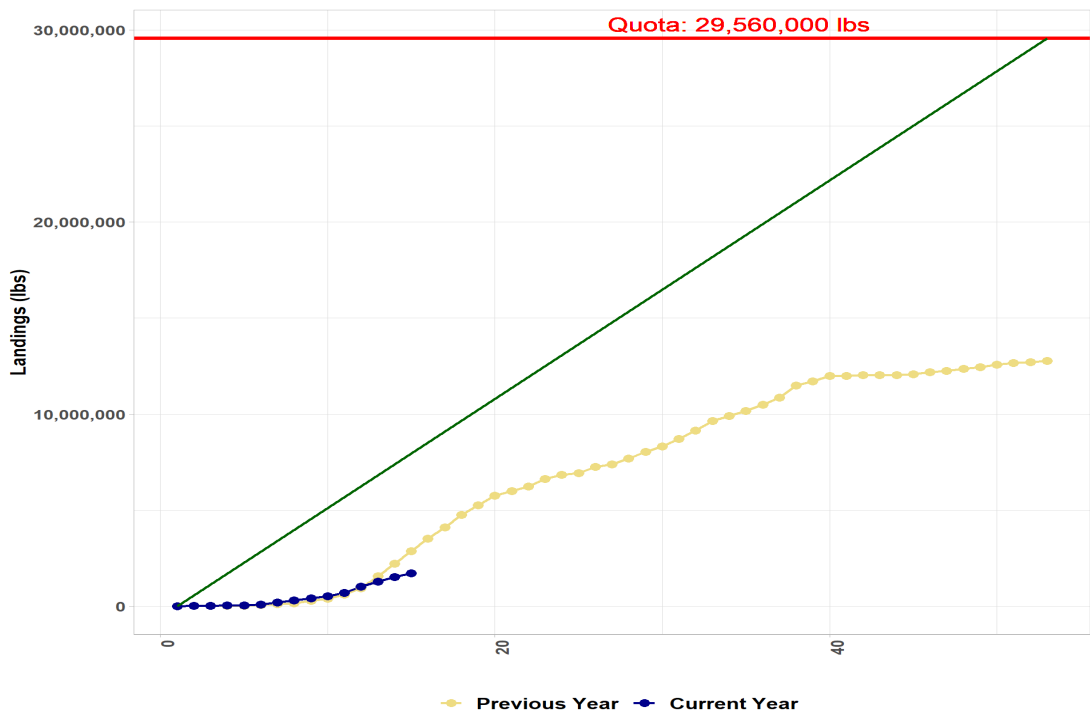


Figure 4. Preliminary Spiny dogfish landings; the 2021 fishing year (Starts May 1) is in blue through August 11, 2021, and the 2020 fishing year is in yellow-orange. Source: <https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region> . <sup>4</sup>

Table 2. Commercial Spiny Dogfish landings (live weight – millions of pounds) by state for 2018-2020 fishing years. Source: NMFS unpublished dealer data. <sup>4</sup>

fishyear	MA	VA	NJ	Other (NC,NH, MD, RI,CT, NY)	Total
2018	7.7	5.6	1.3	3.0	17.6
2019	6.6	7.4	1.9	3.1	19.1
2020	6.6	2.9	1.9	1.4	12.8

Table 3. Commercial Spiny Dogfish landings (live weight – millions of pounds) by month for 2018-2020 fishing years. Source: NMFS unpublished dealer data. <sup>4</sup>

fishyear	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Total
2018	0.0	0.1	2.3	2.7	1.8	1.5	1.3	2.5	1.6	1.8	1.2	0.8	17.6
2019	0.1	0.2	2.3	2.7	1.6	1.0	1.6	2.6	2.3	1.9	2.4	0.4	19.1
2020	0.0	0.3	1.8	2.8	1.5	0.9	1.4	1.6	1.6	0.0	0.4	0.3	12.8

Table 4. Commercial Spiny Dogfish landings (live weight – millions of pounds) by gear for 2018-2020 fishing years. Source: NMFS unpublished dealer data. <sup>4</sup>

fishyear	GILL_NET_SINK_OTHER	UNKNOWN	LONGLINE_BOTTOM	GILL_NET_SETS_TAKE_SEA_BASS	HAND_LINE_OTHER	TRAWL_OTTER_BOTTOM_FISH	Other	Total
2018	10.2	2.9	0.5	1.3	1.8	0.4	0.4	17.6
2019	12.1	3.0	1.3	1.5	0.5	0.5	0.3	19.1
2020	9.0	1.2	2.0	0.1	0.0	0.4	0.0	12.8

Table 5. Participation by fishing year of federally-permitted vessels. State-only vessels are not included. <sup>4</sup>

<b>YEAR</b>	<b>Vessels 200,000+</b>	<b>Vessels 100,000 - 199,999</b>	<b>Vessels 50,000 - 99,999</b>	<b>Vessels 10,000 - 49,999</b>	<b>Total with at least 10,000 pounds landings</b>
2000	16	10	8	43	77
2001	4	12	10	33	59
2002	2	14	8	31	55
2003	4	5	3	17	29
2004	0	0	0	42	42
2005	0	0	1	67	68
2006	0	4	11	114	129
2007	1	2	21	72	96
2008	0	5	20	119	144
2009	0	11	42	166	219
2010	0	26	54	124	204
2011	1	48	73	135	257
2012	25	55	56	146	282
2013	10	27	45	87	169
2014	27	38	38	81	184
2015	31	33	36	59	159
2016	52	26	14	45	137
2017	28	27	24	32	111
2018	28	26	20	35	109
2019	29	25	21	29	104
2020	23	27	15	22	87

Staff received a request about participation in May-August 11, 2021 (i.e. most recent year to date). While very preliminary, no federally-permitted vessels had yet landed over 200,000 pounds and only 22 had landed over 10,000 pounds.

## Trip Limits and Prices

To consider the potential effect of federal trip limit changes on spiny dogfish ex-vessel prices, staff examined the most recent two federal trip limit changes, which occurred on September 8, 2014 (4,000 pounds to 5,000 pounds and August 15, 2016 (5,000 pounds to 6,000 pounds). The May 1, 2013 trip limit change (3,000 pounds to 4,000 pounds) occurred during a time of the year when weekly landings are low, making analysis across the trip limit change date problematic. Trip limit changes further back in time may be less reflective of current conditions.

Staff first noted that looking at annual prices (Figure 3), there did not seem to be negative changes in the relevant fishing years. The changes took place about one-third into the fishing year (begins May 1) so were in effect for about two-thirds of each respective fishing year. Compared to the prior year, annual average price increased in both 2014 (vs 2013) and 2016 (vs 2015). While average price fell in each subsequent year (the first full year after the trip limit change), the subsequent full year's average price was still above the prior full year's average price in both instances (i.e. 2015 vs 2013 and 2017 vs 2015).

Staff then reviewed landings data from the four weeks preceding and following the two respective trip limit changes. In both instances, vessels began using the higher trip limit after the change, but not all trips landed at or near the trip limit. In neither case did there appear to be a negative effect on prices. Staff examined these relatively small time periods in an effort to isolate the effect of the trip limit change from other potential external effects on supply and demand that could affect prices paid to vessels.

In 2014, in the four weeks before the change (September 8, 2014), 2.6 million pounds of spiny dogfish were landed at an average price of \$0.21. In the four weeks after the change, 2.2 million pounds were landed at an average price of \$0.22.

In 2016, in the four weeks before the change (August 15, 2016), 4.2 million pounds of spiny dogfish were landed at an average price of \$0.23. In the four weeks after the change, 3.8 million pounds were landed at an average price of \$0.25.

Staff also reviewed 2018-2020 data for trips over 10,000 pounds, which all occurred in North Carolina. Prices for these trips (about 120 and averaging 12,800 pounds) averaged \$0.12 per pound, well below the average prices in those years. However differences in shipping costs make it difficult to determine if trip size is a factor in the differences in ex-vessel prices. By comparison, landings from those years between 5,000 pounds and 6,000 pounds averaged \$0.17 per pound in Virginia and \$0.22 per pound in Massachusetts.

In general, a review of fishery performance bridging the last two trip limit increases does not raise concern to staff that a relatively small, incremental trip limit change would substantially affect ex-vessel prices. However, data are not available to examine larger changes and any proposal for a large increase in trip limits should be considered cautiously.

## References

<sup>1</sup> Stehlik, Linda. 2007. Essential Fish Habitat source document: Spiny Dogfish, *Squalus acanthias*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-203; 52 p.

<sup>2</sup> NEFSC 2018. Spiny Dogfish Assessment Update. Available at <http://www.mafmc.org/ssc-meetings/2018/sept-11>.

<sup>3</sup> NEFSC 2019. Spiny Dogfish Data Update. Available at <http://www.mafmc.org/ssc-meetings/2019/september-9-11>.

<sup>4</sup> Unpublished NMFS dealer and/or Vessel Trip Report data.





**Mid-Atlantic Fishery Management Council**  
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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman  
Christopher M. Moore, Ph.D., Executive Director

## MEMORANDUM

**Date:** September 20, 2021  
**To:** Council  
**From:** Matthew Seeley, Council staff  
**Subject:** Update on Private Recreational Tilefish (Golden and Blueline) Permitting and Reporting

The Council will receive a presentation from the Greater Atlantic Regional Fisheries Office on the status of private recreational tilefish (golden and blueline) permitting and reporting on Wednesday, October 6, 2021, from 11:00 a.m. to 12:00 p.m. The goal of this presentation is to update the Council on the private permitting and reporting regulations and overall initiative. In summary, given the small community of private recreational tilefish anglers in relation to other Mid-Atlantic Council managed species and the need for improved recreational data collection, private recreational tilefish permitting and reporting was approved in Amendment 6 to the Tilefish Fishery Management Plan.<sup>1</sup> Private recreational permitting and reporting requirements went live in August 2020. This update will include information related to the number of issued permits, landings, reporting systems, and lessons learned.

Outreach materials and other resources are available on the [Council's Tilefish Permitting and Reporting Webpage](#).

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<sup>1</sup> [Amendment 6 to the Tilefish FMP](#).



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## MEMORANDUM

**Date:** September 23, 2021  
**To:** Council  
**From:** Karson Coutre, Staff  
**Subject:** Atlantic Large Whale Take Reduction Team scoping for risk reduction measures for Atlantic trap/pot and gillnet fisheries

On October 6, the Council will review scoping materials for phase two of the Atlantic Large Whale Take Reduction Plan (ALWTRP) which focuses on reducing the risk of entanglement to right, humpback, and fin whales in U.S. East Coast gillnet, Atlantic mixed species trap/pot, and Mid-Atlantic lobster and Jonah crab trap/pot fisheries. The measures that will be developed in phase two of this plan have the potential to impact several Council managed fisheries and the Protected Resources Committee has developed recommendations for Council engagement in scoping and the ALWTRT process. Materials listed below are provided for the Council's consideration of this agenda item.

- 1) Protected Resources Committee meeting summary from September 20, 2021
- 2) Federal Register Notice of intent to prepare an environmental impact statement by NMFS dated August 11, 2021
- 3) NMFS ALWTRP scoping announcement and schedule dated August 18, 2021
- 4) Public Comments received by September 23, 2021

More information can be found on the [Atlantic Large Whale Take Reduction Plan webpage](#).





## **Protected Resources Committee Meeting Summary**

### **Monday, September 20, 2021, 1:00 pm - 3:30 pm**

The Protected Resources Committee met via webinar and reviewed a presentation of scoping materials from Colleen Coogan for phase two of the Atlantic Large Whale Take Reduction Plan (ALWTRP). This phase focuses on reducing the risk of entanglement to large whales in U.S. East Coast gillnet, Atlantic mixed species trap/pot, and Mid-Atlantic lobster and Jonah crab trap/pot fisheries. The measures that will be developed in phase two of this plan have the potential to impact several Council managed fisheries and the Protected Resources Committee discussed recommendations for Council engagement in scoping and the entire ALWTRP process as they further develop risk reduction measures.

**Committee Members in attendance:** Chris Batsavage, Maureen Davidson, Peter Hughes, Sonny Gwin, Dewey Hemilright, Sara Winslow

**Others in attendance:** Karson Coutre (MAFMC Staff and ALWTRT Representative), Colleen Coogan (NMFS Protected Resources), Terry Alexander (NEFMC ALWTRT Representative), Kim McKown (NYSDEC)

#### **Questions and Discussion**

Committee members asked several clarifying questions about gear modifications and breaking strength of different types of line. It was discussed that most 3/8-inch line has too high of breaking strength for whales to escape. Rope manufacturers usually make their line stronger than the minimum breaking strength, so it has been hard to find production of weaker line. One participant noted that although there are seasonally required weak inserts for gillnetters, they are actually fishing those nets year-round instead of switching gear. This means that some of the risk of entanglement is already reduced or there may be areas where it is less risky than previously thought. A Committee member also noted that there used to be a gear liaison in the mid-Atlantic that would walk the docks and provide helpful information and asked whether that position could be brought back. Colleen Coogan from NMFS indicated that this position was not filled after a retirement due to budget issues and they are trying to secure funding for this position. A Committee member also noted that when discussing minimum numbers of traps per trawl, smaller boats may not be able to carry the minimum number required. Colleen noted that conservation equivalencies for these smaller boats can be discussed ahead of time.

A Committee member asked whether measures were being sought on a broad geographic scale or smaller discreet area specific regulations. Colleen responded that both are tools that were used in the phase one in the New England area and people can provide feedback on what would work best for the region during scoping. There could be broad requirements for precautionary measures like weak inserts and then smaller more restrictive options such as area closures in whale and gear overlap hotspots.

Another Committee member asked about the potential for overlap or conflicting regulations with other TRTs such as bottlenose dolphin and harbor porpoise. Colleen responded that the NEPA analysis would take those into account. Some measures being discussed such as tie downs on gillnets are in the porpoise plan in the mid-Atlantic and tie downs are also suggested in this scoping for this TRT, so they could be a requirement that reduces risk of multiple protected species. Another place there could be overlap is area closures, but area closures could also move effort to an area that increases the risk to other species.

A Committee member and a participant voiced concerns that the mobile gear fleet is often left out of these conversations because the mobile fleet doesn't interact with right whales, so the regulations don't directly require them to change their gear or area fished. However, moving towards ropeless fishing on fixed gear is going to impact the mobile fleet because they will not know where to avoid. There could be increased chance of catching a ropeless pot which will be a lose-lose situation for the fishermen involved. There are ways to detect these ropeless traps electronically, but every mobile gear vessel would need to add that equipment which is costly. A Committee member asked what the system will be for identifying where ropeless gear is and noted that there can be penalties associated with gear interactions. Colleen responded that ropeless gear is not being required and they are testing a gear marking phone application instead of expensive electronic equipment. That system would have to be worked out before ropeless could be more broadly fished.

Multiple Committee members discussed that effort is already low in the region and in several areas the number of participants in the fisheries are declining. Because of this they voiced concern over further reducing effort. One Committee member asked what the baseline year would be for analyzing the risk reduction needed. Colleen noted that reducing risk does not have to mean reducing effort, so gear modifications or shifting effort to a different area are ways to reduce the risk of whale interactions while maintaining the same level of effort. She added that 2020 is the most recent year of data, however given the expressed concerns about COVID impacts on 2020 fishing, there may be a case for using other years such as 2017, the year phase 1 was based on. Committee members voiced concerns with using 2020 due to decreased commercial effort and difficulties in data collection and Colleen noted that this could be added to the ALWTRT agenda so they can consider the appropriate year in later meetings.

One Committee member noted that on the co-occurrence graphs for pot/trap fisheries it appeared that there was effort off North Carolina that did not look realistic because he does not know of very much pot/trap fishing occurring in that area. Colleen said she would follow up with the team members who conducted the analysis.

Committee members also asked whether action was being taken to decrease ship strikes and how wind energy areas were being factored into the plan to reduce right whale interactions. Wind energy areas will reduce the footprint of available fishing ground for mobile fleets but might still be accessible to fixed gear fisheries. Colleen responded that decreasing whale takes in both of those areas is important but out of the jurisdiction of NMFS and the ALWTRT process, however they are being addressed in different ways.

One Committee member was concerned with the lack of clarity on what is currently being asked of fishermen. He said that more information should be provided from logbooks and the observer program to describe what percent reduction is needed from each fishery or gear type so that fishermen can better weigh in on ideas about how to do it. Colleen noted that in this early scoping phase there are a lot of ways that the reductions could happen so there is not a set percent reduction per gear type or per fishery. The overall risk reduction target is about 80% for gillnet and other pot/trap fisheries (besides lobster, covered in phase 1) along the Atlantic coast. Helpful input at this stage from fishermen is comments on what is not feasible or what they think they could implement.

Lastly, the Committee discussed whether this ALWTRT process will incorporate or require Council action. Several of the scoping ideas will not require Council action however Council actions will be included in the analysis if they reduce risk of right whale interactions. There are also some topics such as trap caps or limited access fisheries that were suggested during brainstorming for scoping that may be more appropriately addressed through the Council process given the complexity and history of different fisheries.

### **Committee Recommendations to the Council**

- At the current stage in the process the options on the table are broad ideas that have the potential to be implemented in several different ways. Based on the estimated timeline, this process is approximately one year away from any proposed rulemaking. It will be important to keep the Protected Resources Committee informed and engaged in the process during later development of alternatives. There may be an opportunity for the Committee to be briefed during intentional breaks in the TRT meeting agenda, which in some cases includes a day between meetings when remote. **The Committee recommends meeting as needed throughout the process and making more specific recommendations on measures as appropriate later in the action development.**
- Stakeholder participation is going to be crucial to the successful development of realistic measures, therefore **the Committee recommends state managers and other Council members reach out to their stakeholders to highlight the need for their input during the scoping period.** Given the timing of the Council meeting, highlighting the call-in days hosted by NMFS and the email address to submit written comments may be most productive.
- **The Committee also recommends that issues such as limited access fisheries, changes to permitting, or trap caps in a fishery should be addressed through the Council process.**

focus of the work, and collect initial stakeholder input.

**DATES:** These webinars will be held on Monday, August 30, 2021, at 4 p.m.–5:30 p.m.; Wednesday, September 1, 2021, at 6 p.m.–7:30 p.m.; Thursday, September 2, 2021, at 10 a.m.–11:30 a.m.

**ADDRESSES:** All meeting participants and interested parties are strongly encouraged to register in advance of any webinar they are interested in attending. Meeting links for each webinar can be located at: <https://www.mafmc.org/climate-change-scenario-planning>.

*Meeting addresses:* The meetings will be held via webinar (see **SUPPLEMENTARY INFORMATION**).

**FOR FURTHER INFORMATION CONTACT:** Thomas A. Nies, Executive Director, New England Fishery Management Council; telephone: (978) 465–0492. Contact information and individual staff members working on this initiative can be found here: <https://www.mafmc.org/climate-change-scenario-planning>.

**SUPPLEMENTARY INFORMATION:**

**Background**

Climate change is a growing threat to marine fisheries worldwide. On the East coast of the United States, there is evidence of climate-related shifts in distribution, abundance, and/or productivity of fishery resources. It is uncertain what the next couple of decades will bring, and how fishery management programs can best prepare to meet the challenges ahead. Over the next year, this joint effort will bring together researchers, fishery managers, fishery participants and others to discuss these questions and emerge with ideas and recommendations for how fishery management can potentially adapt to climate change.

The management bodies in this region have decided to employ a scenario planning framework to discuss these issues. Scenario planning is a way of exploring how fishery management may need to evolve over the next few decades as climate change becomes a bigger issue. Specifically, scenarios are stories about possible future developments. This approach is designed to help stakeholders and managers think broadly about the future implications of climate change to help define what changes can potentially be made now to be better prepared.

These introductory webinars are the first step of a multi-year scenario planning effort. Staff will explain the overall initiative and share draft objectives, possible outcomes and focus of the work. There will be a presentation introducing the basics of scenario

planning and potential benefits of engaging in the process. At the end of the webinar there will be an opportunity for small group discussions for participants to share feedback and suggestions on the information presented and proposed. Additional details about the webinars will be posted to this page once available: <https://www.mafmc.org/climate-change-scenario-planning>.

**Special Accommodations**

These meetings are physically accessible to people with disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Thomas A. Nies, Executive Director, at (978) 465–0492, at least 5 days prior to the meeting date.

(Authority: 16 U.S.C. 1801 *et seq.*)

Dated: August 5, 2021.

**Tracey L. Thompson,**

*Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.*

[FR Doc. 2021–17051 Filed 8–10–21; 8:45 am]

**BILLING CODE 3510–22–P**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

[RTID: 0648–XB307]

**Environmental Impact Statement on Phase 2 Modifications to the Atlantic Large Whale Take Reduction Plan To Reduce Serious Injury and Mortality of Large Whales in Commercial Trap/Pot and Gillnet Fisheries Along the U.S. East Coast**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of intent to prepare an environmental impact statement, request for comments.

**SUMMARY:** The National Marine Fisheries Service (NMFS) intends to begin a rulemaking process that will amend the Atlantic Large Whale Take Reduction Plan (Plan) to reduce the risk of mortalities and serious injuries of North Atlantic right whales (*Eubalaena glacialis*) and other large whales caused by entanglement in commercial trap/pot and gillnet fisheries along the U.S. East Coast. An Environmental Impact Statement (EIS) will be prepared in accordance with the National Environmental Policy Act (NEPA) to analyze the impacts to the environment of alternatives to amend the Plan. This notice informs the public of upcoming

scoping meetings to solicit public input on Phase 2 of our efforts to reduce the risk of entanglement to right, humpback, and fin whales in U.S. commercial fisheries managed under the Plan. Phase 1, a final rule implementing new modifications to reduce mortalities and serious injuries caused by incidental entanglement in the northeast American lobster and Jonah crab trap/pot fishery, is anticipated shortly, and was analyzed in a Final Environmental Impact Statement released (FEIS) on July 2, 2021. Phase 2 focuses on risk reduction in U.S. East Coast gillnet, Atlantic mixed species trap/pot, and Mid-Atlantic lobster and Jonah crab trap/pot fisheries.

**DATES:** Written or electronic scoping inputs must be received at the appropriate address, email mailbox, or phone number (see **ADDRESSES**) by October 21, 2021.

*Public Hearings:* At least seven virtual public meetings will be held during the public comment period. In addition, we will be holding three call-in days for interested parties to call and speak to a NMFS staff member to ask questions or submit information and recommendations.

See **ADDRESSES** to obtain public hearing and call-in day notification details. Scoping will also occur through presentations and discussions at the Atlantic States Marine Fisheries Commission and New England, Mid-Atlantic, and South Atlantic Fishery Management Council meetings during the scoping period.

**ADDRESSES:** You may submit input on this document via email. Submit all electronic public comments by sending an email to [nmfs.gar.ALWTRT2021@noaa.gov](mailto:nmfs.gar.ALWTRT2021@noaa.gov) using the subject line “Comments on Atlantic Large Whale Take Reduction Plan Scoping.” Input can also be provided via webinar during scoping meetings or via phone on call-in days. Remote public meeting dates, access, and call-in information is available in the **SUPPLEMENTARY INFORMATION** section. Meeting information will also be posted on the Plan website [fisheries.noaa.gov/ALWTRP](https://fisheries.noaa.gov/ALWTRP), or you may contact Marisa Trego for information on dates and times.

**FOR FURTHER INFORMATION CONTACT:** Marisa Trego, Take Reduction Team Coordinator, Greater Atlantic Region. Telephone: 978 282–8484. Address: 55 Great Republic Drive, Gloucester, MA 01930. Email: [marisa.trego@noaa.gov](mailto:marisa.trego@noaa.gov).

**SUPPLEMENTARY INFORMATION:**

### Purpose and Need for Proposed Action

The proposed action for analysis in the EIS would be NMFS rulemaking to modify the Plan to reduce mortalities and serious injuries from incidental commercial fishing gear entanglements in U.S. East Coast gillnet fisheries as well as trap/pot fisheries, including the Atlantic mixed species and Mid-Atlantic lobster and Jonah crab fisheries. NMFS' purpose for the proposed action is to fulfill the mandates of the MMPA to reduce incidental mortalities and serious injuries of large whales to below each stock's potential biological removal (PBR) level.

North Atlantic right whales are listed as endangered under the Endangered Species Act (ESA) and considered depleted under the Marine Mammal Protection Act (MMPA). After more than two decades of an increasing trend, the right whale population has been declining since 2010, and the most recent estimate of 368 whales in 2019 (Pace 2021) is well below the optimum sustainable population. This estimate represents a minimum population number and reflects new research suggesting that many mortalities occur undetected (Pace *et al.* 2021). The decline was exacerbated by an Unusual Mortality Event (UME) that began in 2017, when a total of 17 confirmed dead right whales were documented. As of July 2021, the UME totals 50 individuals, comprising 34 right whale mortalities and an additional 16 seriously injured right whales. Of these 50 individuals, 18 definitively involved entanglement and another 5 were probable entanglements. During this period (2017–2021), only 40 calves have been born.

One of the primary causes of mortality and serious injury of North Atlantic right whales is entanglement in fishing gear. Climate change and associated changes in prey abundance and distribution are exacerbating the population decline by shifting the overlap between right whales and fisheries and reducing the population's resilience to stressors. With mortalities continuing to outpace births, the population decline continues and further mitigation of entanglements that cause mortality or serious injury is necessary for population recovery.

The MMPA mandates that NMFS develop and implement Take Reduction Plans for preventing the depletion and assisting in the recovery of certain marine mammal stocks that are killed or seriously injured incidental to commercial fisheries. Pursuant to the MMPA, NMFS convenes Take Reduction Teams composed of

stakeholders to develop recommendations that achieve a short-term goal of reducing mortalities and serious injuries of marine mammals covered by the plan to a rate below each stock's PBR level. NMFS considers those recommendations when implementing Take Reduction Plans through the rulemaking process.

The Atlantic Large Whale Take Reduction Team (Team) was first convened in 1996 to recommend measures to reduce mortalities and serious injuries of right, humpback, and fin whales incidental to certain commercial fisheries. NMFS implements measures under the Plan. Since 1997, the Plan has been amended several times to reduce the impacts of fishing gear on large whales in the region through measures that include area closures, gear configuration requirements, and gear marking rules. A final rule implementing new modifications to reduce mortalities and serious injuries caused by entanglement in the northeast American lobster and Jonah crab trap/pot fishery is anticipated shortly, and was analyzed in a FEIS released on July 2, 2021 (86 FR 35288).

In 2021, the Team convened to address large whale mortalities and serious injuries caused by entanglements in the U.S. East Coast gillnet, Atlantic mixed species trap/pot, and mid-Atlantic lobster and Jonah crab trap/pot fisheries. Specifically, these fisheries include: (1) Mid-Atlantic gillnet fisheries for monkfish, spiny dogfish, smooth dogfish, bluefish, weakfish, menhaden, spot, croaker, striped bass, large and small coastal sharks, Spanish mackerel, king mackerel, American shad, black drum, skate species, yellow perch, white perch, herring, scup, kingfish, spotted seatrout, and butterfish; (2) Northeast sink gillnet fisheries for Atlantic cod, haddock, pollock, yellowtail flounder, winter flounder, witch flounder, American plaice, windowpane flounder, spiny dogfish, monkfish, silver hake, red hake, white hake, ocean pout, skate spp, mackerel, redfish, and shad; (3) Northeast drift gillnet fisheries for shad, herring, mackerel, and menhaden and any residual large pelagic driftnet effort in New England; (4) Southeast Atlantic gillnet fisheries for finfish, including, but not limited to: King mackerel, Spanish mackerel, whiting, bluefish, pompano, spot, croaker, little tunny, bonita, jack crevalle, cobia, and striped mullet; (5) Southeast Atlantic shark gillnet fisheries for large and small coastal sharks, including but not limited to blacktip, blacknose, finetooth, bonnethead, and sharpnose sharks; (6)

Northeast anchored float gillnet fishery for mackerel, herring (particularly for bait), shad, and menhaden; and (7) Atlantic mixed species trap/pot fisheries for hagfish, shrimp, conch/whelk, red crab, Jonah crab, rock crab, black sea bass, scup, tautog, cod, haddock, Pollock, redfish (ocean perch), white hake, spot, skate, catfish, stone crab, and cunner; (8) Mid-Atlantic trap/pot fisheries for lobster and Jonah crab, and (9) Atlantic trap/pot fishery for Atlantic blue crab.

The Team met most recently on June 28 and July 1, 2021, to discuss the types of management actions that should be included in scoping to decrease the risk and severity of right whale and other large whale entanglements in the above-listed fisheries. Further information about the Plan and the 2021 Team meetings where potential management measures were discussed, including recordings of all the meetings, can be found at the Team's website: <https://www.fisheries.noaa.gov/alwtrp>.

### Preliminary Description of Proposed Action and Alternatives

NMFS will consider suites of regulatory measures that would modify existing Plan requirements to address ongoing large whale entanglements. The primary purpose of the Plan modifications is to reduce the mortality and serious injury of right whales in U.S. East Coast gillnet, Atlantic mixed species trap/pot, and Mid-Atlantic lobster and Jonah crab trap/pot fisheries. In addition to the proposed action and the no action alternative, potential alternatives that the draft EIS may analyze include measures that would reduce or weaken line in gear associated with these fisheries, to reduce co-occurrence of this gear and right whales, and to improve identification of entangling gear. For gillnet fisheries, possible management options include changing configurations such as increasing the minimum number of net panels per set to reduce endline numbers, gear tending or daytime-only sets for gillnets, installation of weak links at panels and weak rope that breaks at forces of less than 1,700 lb, establishing seasonal restricted areas, and expanding gear marking requirements. For trap/pot fisheries, possible management options include changing configurations such as traps per trawl to reduce endline numbers and installation of weak inserts or ropes that break at forces of less than 1,700 lb, establishment of seasonal restricted areas, and expansion of gear marking requirements.

NEPA (42 U.S.C. 4321 *et al.*) requires that Federal agencies conduct an

environmental analysis of their proposed actions to determine if the actions may significantly affect the human environment. NMFS has determined that an EIS should be prepared under NEPA for the purpose of informing rulemaking to modify the Plan. We will prepare an EIS in accordance with NEPA requirements, as amended (42 U.S.C. 4321 *et al.*); NEPA implementing regulations (40 CFR 1500–1508); and other Federal laws, regulations, and policies. Reasonable alternatives that are identified during the scoping period will be evaluated in the draft EIS.

### Summary of Expected Impacts

The draft EIS will identify and describe the potential effects of the proposed action on the human environment that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action. This includes such effects that occur at the same time and place as the proposed action or alternatives and such effects that are later in time or occur in a different place. The proposed action may include, but is not limited to, modifications to configurations of fishing gear, modification to fishing seasons and/or areas, and modifications to gear marking requirements. Expected potential impacts to commercial fishermen in the above-mentioned fisheries may include, but are not limited to, additional costs and labor for modifying gear configurations and gear markings, and reduced profit due to reduced catches, access to fishing grounds, or seasons. Expected potential impacts to Atlantic large whales include, but are not limited to, reduced mortality and serious injury due to a reduction in entanglement in fishing gear or reduced severity of any entanglements that do occur. Other potential impacts may include, but are not limited to, impacts (both beneficial and adverse) to other marine life, cultural resources, demographics, employment, and economics. These expected potential impacts will be analyzed in the draft and final EIS.

### Schedule for the Decision-Making Process

After the draft EIS is completed, NMFS will publish a notice of availability (NOA) and request public comments on the draft EIS. NMFS expects to issue the NOA in the Fall of 2022. After the public comment period ends, NMFS will review, consider, and respond to comments received and will develop the final EIS. NMFS expects to make the final EIS available to the public in 2023. A record of decision will

be completed no sooner than 30 days after the final EIS is released, in accordance with 40 CFR 1506.11.

**Scoping Process:** This NOI commences the public scoping process for identifying issues and potential alternatives for consideration. Throughout the scoping process, Federal agencies, state, tribal, local governments, and the general public have the opportunity to help NMFS determine reasonable alternatives and potential measures to be analyzed in the EIS, as well as to provide additional information.

NMFS will hold virtual public scoping meetings at the following dates and times (eastern):

- Thursday, September 9, 2021, 6:30–8:30 p.m., for Maryland, Delaware, Virginia, Northern North Carolina trap/pot fisheries;
- Tuesday, September 14, 2021, 6:30–8:30 p.m., for Rhode Island, Connecticut, New York, and New Jersey trap/pot fisheries;
- Tuesday, September 21, 2021, 6:30–8:30 p.m., for Maine, New Hampshire, Massachusetts, and Rhode Island trap/pot fisheries;
- Thursday, September 23, 2021, 6:30–8:30 p.m., for Rhode Island, Connecticut, New York, and New Jersey gillnet fisheries;
- Tuesday, October 5, 2021, 6:30–8:30 p.m., for Southern North Carolina, South Carolina, Georgia, Florida, all gear;
- Tuesday, October 12, 2021, 6:30–8:30 p.m., for Maryland, Delaware, Virginia, Northern North Carolina gillnet fisheries;
- Thursday, October 14, 2021, 6:30–8:30 p.m., for Maine, New Hampshire, Massachusetts, and Rhode Island gillnet fisheries.

To register, go to our website: <https://www.fisheries.noaa.gov/alwtrp>. NMFS will also hold public call-in days:

- Friday, October 1, 2021, 12 noon to 6 p.m.
- Monday, October 4, 2021, 8 a.m. to 3 p.m.
- Tuesday, October 12, 10 a.m. to 4 p.m.

For more information on how to call, go to our website: <https://www.fisheries.noaa.gov/alwtrp>.

### Request for Identification of Potential Alternatives, Information, and Analyses Relevant to the Proposed Action

Everyone potentially impacted by or interested in changes to the Plan, and particularly, management of commercial trap/pot and gillnet fisheries along the East Coast, is invited to participate in the public scoping process by

submitting written input, attending public scoping webinar meetings, or calling us during designated call-in days. This scoping process aims to gather input regarding the scope of actions to be proposed for rulemaking, the development of alternatives to analyze in the EIS, and the potential impacts of management actions.

For gillnet fisheries, the Team discussed and NMFS requests input on management options, particularly concerning information about operational challenges, time, and costs required to change configurations such as net panels per set to reduce endline numbers, gear tending or daytime-only sets for gillnets, installation of weak inserts or rope that breaks at forces of less than 1,700 lb, to establish restricted areas, and to expand gear marking requirements. For trap/pot fisheries, the Team discussed and NMFS requests input on management options, particularly including information about operational challenges, time, and costs required to change configurations such as traps per trawl to reduce endline numbers and to install weak inserts or rope that breaks at forces of less than 1,700 lb, to establish restricted areas, and to expand gear marking requirements.

NMFS and the Team particularly request input on latent effort in U.S. East Coast gillnet and trap/pot operations that may affect measures designed to reduce gear that could entangle whales, potential impacts to fishery operations arising from gear modifications likely to be considered, potential risks and benefits to large whales, and information regarding whale distribution or behavior along the U.S. East Coast that should be considered in developing risk reduction measures. In addition to direct costs of replacing new gear, input is requested on indirect cost of gear modification measure alternatives, such as costs and time required to install sleeves, install weak rope, and mark gear, and costs related to fewer vertical lines, seasonal closures, or exempted areas. Information on the value of whale conservation and the economic benefits of whale conservation is also requested.

NMFS and the Team also identified data needs to support future discussions, including data on open access fisheries, gear configurations across the fisheries, whale distribution, whale behavioral information, and gear marking. Data related to fishing gear configurations specific to areas or target species, how gear alterations measures may affect those fisheries, and how existing gear configurations contribute to large whale entanglement risk would

be very welcome. As an example, longer gear marks near the buoy and gear marks distinguishing permitting states, specific Federal and state water markings, and gear identification tape throughout buoy lines were analyzed in the FEIS released on July 2, 2021, for northeast lobster and Jonah crab trap/pot fisheries. One Team member suggested restricting fishing rope diameter to no greater than 0.5 inch (1.27 cm) to distinguish it from offshore Canadian gear.

Information received through this scoping process will inform the development of alternative risk reduction measures for an environmental impact analysis. Only inputs and suggestions that are within the scope of the proposed actions will be considered when developing the alternatives for analysis in the EIS. This includes items related to reducing risk of mortality and serious injury of large whales due to entanglements in commercial U.S. fishing gear and improving gear marking to reduce uncertainty about where entanglements occur. The purpose is to develop measures to fulfill the requirements of Section 118 of the MMPA, which regulates the taking of marine mammals incidental to U.S. commercial fishing operations. NMFS implements additional endangered species conservation and recovery programs under the ESA and also affords marine mammals protections under multiple programs pursuant to the MMPA. Therefore, for the purposes of the scoping period for this proposed action, we are not requesting input related to other stressors, such as vessel strikes, anthropogenic noise, natural mortality, international entanglement risk, offshore wind development, or climate change.

To promote informed decision-making, input should be as specific as possible and should provide as much detail as necessary to allow a commenter's meaningful participation and fully inform NMFS of the commenter's position. Input should explain why the issues raised are important to the consideration of potential environmental impacts and alternatives to the proposed action, as well as economic and other impacts affecting the quality of the human environment.

It is important that reviewers provide their input at such times and in such a manner that they are useful to the agency's preparation of the EIS. Comments should be provided prior to the close of the scoping period and should clearly articulate the reviewer's concerns and contentions. Input

received in response to this solicitation, including names and addresses of those who comment, will be part of the public record for this proposed action. Input submitted anonymously will be accepted and considered.

#### Citations

- Pace III, R.M. May 2021. Revisions and Further Evaluations of the Right Whale Abundance Model: Improvements for Hypothesis Testing. NOAA NEFSC Tech Memo 269.
- Pace, R.M., R. Williams, S.D. Kraus, A.R. Knowlton, H.M. Pettis. 2021. Cryptic mortality in North Atlantic right whales. *Conserv. Sci. Pract.* 3:e346.

*Authority:* This NOI is published pursuant to NEPA, 42 U.S.C. 4321 *et al.*, and MMPA, 31 U.S.C. 1361 *et al.*

Dated: August 6, 2021.

#### Catherine Marzin,

*Acting Director, Office of Protected Resources, National Marine Fisheries Service.*

[FR Doc. 2021-17126 Filed 8-10-21; 8:45 am]

**BILLING CODE 3510-22-P**

## DEPARTMENT OF COMMERCE:

### National Oceanic and Atmospheric Administration

[RTID 0648-XB280]

#### Gulf of Mexico Fishery Management Council; Public Meeting; Correction

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice of a correction to a public meeting.

**SUMMARY:** NMFS, NOAA, published a document in the *Federal Register* of August 3, 2021, regarding a meeting of the Gulf of Mexico Fishery Management Council (Council). The meeting has since changed to a hybrid meeting offering both in-person and virtual options for attending the meeting.

**FOR FURTHER INFORMATION CONTACT:** Dr. Carrie Simmons, Executive Director, Gulf of Mexico Fishery Management Council; telephone: (813) 348-1630.

#### SUPPLEMENTARY INFORMATION:

##### *Correction*

In the *Federal Register* of August 3, 2021, in FR Doc. 2021-16465, on page 41832, in the first column, correct the third full paragraph to read:

The meeting will be a hybrid meeting. You may register for the webinar to listen-in only by visiting [www.gulfcouncil.org](http://www.gulfcouncil.org) and click on the Council meeting on the calendar.

On page 41831, under heading *Wednesday, August 25, 2021; 8:30 a.m.–5:30 p.m.*, correct the last paragraph to read:

The Council will hold public testimony from 2:45 p.m. to 5:30 p.m., EDT for Potential Reconsideration of Final Document—Framework Action: Gulf of Mexico *Red Snapper* Recreational Data Calibration and Recreational Catch Limits, and open testimony on other fishery issues or concerns. Public comment may begin earlier than 2:45 p.m. EDT, but will not conclude before that time. Persons wishing to give public testimony in-person must register at the registration kiosk in the meeting room. Persons wishing to give public testimony virtually must sign up on the Council website on the day of public testimony. Registration for virtual testimony closes one hour (1:45 p.m. EDT) before public testimony begins.

*Authority:* 16 U.S.C. 1801 *et seq.*

Dated: August 3, 2021.

#### Tracey L. Thompson,

*Acting Deputy Director, Office of Sustainable Fisheries, National Marine Fisheries Service.*

[FR Doc. 2021-16860 Filed 8-10-21; 8:45 am]

**BILLING CODE 3510-22-P**

## BUREAU OF CONSUMER FINANCIAL PROTECTION

[Docket No. CFPB-2021-0014]

### Agency Information Collection Activities: Comment Request

**AGENCY:** Bureau of Consumer Financial Protection.

**ACTION:** Notice and request for comment.

**SUMMARY:** In accordance with the Paperwork Reduction Act of 1995 (PRA), the Bureau of Consumer Financial Protection (Bureau) is publishing this notice seeking comment on a Generic Information Collection titled "Electronic Disclosure on Mobile Devices" prior to requesting the Office of Management and Budget's (OMB's) approval of this collection under the Generic Information Collection Plan "Generic Information Collection Plan for Studies of Consumers using Controlled Trials in Field and Economic Laboratory Settings," OMB Control number 3170-0048.

**DATES:** Written comments are encouraged and must be received on or before September 10, 2021 to be assured of consideration.

**ADDRESSES:** You may submit comments, identified by the title of the information collection, OMB Control Number (see

August 18, 2021

## Phase 2 of the Atlantic Large Whale Take Reduction Plan Modifications

We are proposing to modify the Atlantic Large Whale Take Reduction Plan (Plan) to reduce the incidental mortality and serious injury to North Atlantic right whales (*Eubalaena glacialis*), fin whales (*Balaenoptera physalus*), and humpback whales (*Megaptera novaeangliae*) in U.S. East Coast gillnet, Atlantic mixed species trap/pot, and Mid-Atlantic lobster and Jonah crab trap/pot fisheries to meet the goals of the Marine Mammal Protection Act and the Endangered Species Act. These modifications are Phase 2 of our efforts to reduce risk to North Atlantic right whales and other large whales from U.S. commercial fisheries.

[Phase 1](#) addresses the Northeast lobster/Jonah crab trap/pot fishery, and is currently in review at the Office of Information and Regulatory Affairs. We expect it to be finalized shortly. Please check the [Plan](#) page for updates.

We are requesting input and ideas for Phase 2 of our efforts to reduce the risk of entanglement to right, humpback, and fin whales in U.S. commercial fisheries managed under the [Plan](#). As detailed below, stakeholders can participate by attending virtual meetings, calling in by phone on certain days, or sending written comments by email.

**The scoping period runs through October 21, 2021.**

[Find out more about scoping.](#)

### Scoping Meetings Begin September 9, 2021

Scoping meetings will be held via webinar, and will be from 6:30-8:30 p.m. on the days listed below. Days are designated for areas and gear types, though anyone is welcome to attend any meeting and may submit input on any regions/gear types at each meeting. Meetings will be recorded. [To register for a webinar, visit our events page.](#)

- Thursday, September 9, 2021: Delaware, Maryland, Virginia and Northern North Carolina Trap/Pot Fisheries
- Tuesday, September 14, 2021: Rhode Island, Connecticut, New York, and New Jersey Trap/Pot Fisheries
- Tuesday, September 21, 2021: Maine, New Hampshire, Massachusetts, and Rhode Island Trap/Pot Fisheries



- Thursday, September 23, 2021: Rhode Island, Connecticut, New York, and New Jersey Gillnet Fisheries
- Tuesday, October 5, 2021: Southern North Carolina, South Carolina, Georgia, and Florida Trap/Pot and Gillnet Fisheries
- Tuesday, October 12, 2021: Maryland, Delaware, Virginia, and Northern North Carolina Gillnet Fisheries
- Thursday, October 14, 2021: Maine, New Hampshire, Massachusetts, and Rhode Island Gillnet Fisheries

## Call-In Days

If you would like to speak to someone at the Greater Atlantic Regional Fisheries Office about your input on scoping, please call **(978) 282-8479** on the following days and hours. Your phone call may be recorded to fully capture your input. If the phone line is busy, please leave a voicemail. We will get back to you as soon as possible. Please note that the phone line WILL NOT be operational outside of these days and hours.

- Friday, October 1, 2021, Noon to 6 p.m.
- Monday, October 4, 2021, 8 a.m. to 3 p.m.
- Tuesday, October 12, 2021, 10 a.m. to 4 p.m.

## Written Input

You may submit written input by October 21, 2021 to our email address: [nmfs.gar.ALWTRT2021@noaa.gov](mailto:nmfs.gar.ALWTRT2021@noaa.gov).

## Check for Updates

Please check the [Atlantic Large Whale Take Reduction Plan](#) page for updates and additional background information, which will be added in the coming weeks.

## Questions?

Media: Contact [Allison Ferreira](#), Regional Office, 978-281-9103

**From:** [Mary Sabo](#)  
**To:** [Coutre, Karson](#)  
**Subject:** FW: Knack form submission: Add October 2021 Council Meeting  
**Date:** Tuesday, September 14, 2021 10:12:07 AM

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**Name:** David Dow

**Email:** [ddow420@comcast.net](mailto:ddow420@comcast.net)

**Topic (Select One):** North Atlantic Right Whales

**Comments:** As waters warm inshore here on Cape Cod, the large zooplankton prey for NARWs have moved either further offshore into the deeper ocean or Northeast wards into the Gulf of St. Lawrence/Maine. This has increased NARW entanglement mortality from Jonah/lobster pot gear. The collapse of sea herring in the Gulf of Maine has lead the lobster pot fishery using use menhaden and other forage fish from Mid-Atlantic waters as bait. These forage fish species are managed by the MAFMC and are also subject to direct midwater drift net fishing mortality in southern New England waters. The inshore lobster industry has collapsed south of Cape Cod because of warming waters and eutrophication. Thus some type of adaptive, ecosystem-based fisheries management policy will be required in state jurisdictional waters. Thus the ASMFC and MAFMC/NEFMC need to coordinate fisheries management activities in state (0-3 miles) and Federal (3-200 miles) jurisdictional waters. Ocean noise from ocean wind farms in the Mid-Atlantic region and New England region could negatively effects the feeding and birthing habitats of NARWs as 23 wind farms will be built between North Carolina and New England between now and 2030. Thus the MMPA/ESA management process has to be coordinated with the M-S- SFA.



## Mid-Atlantic Fishery Management Council

800 North State Street, Suite 201, Dover, DE 19901

Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org

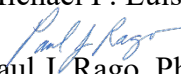
Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

# MEMORANDUM

**Date:** September 22, 2021

**To:** Michael P. Luisi, Chairman, MAFMC

**From:**  Paul J. Rago, Ph.D., Chair, MAFMC Scientific and Statistical Committee (SSC)

**Subject:** Report of the September 2021 SSC Meeting

The SSC met via webinar from 7<sup>th</sup>-8<sup>th</sup> September, 2021, addressing the following topics:

- National Standard 1 Technical Memo on ACL's for Data-Limited Stocks
- Chub Mackerel Specifications for 2022
- Proposal for Exempted Fishing Permit for Thread Herring
- Review Spiny Dogfish ABC for 2022
- Atlantic Mackerel Rebuilding ABC Specifications
- Offshore Wind Fishery Impact Studies
- Review Research Set Aside project update by Economics Working Group
- Review progress of Ecosystem Working Group
- Research Track Assessment schedule and Priorities

See Attachment 1 for the meeting's agenda.

Most SSC members were able to participate for all or part of the meeting (Attachment 2). Other participants included Council members, Council staff, NMFS Headquarters, NEFSC and GARFO staff, and representatives of industry, stakeholder groups, and the general public. Council staff provided outstanding technical support throughout the process. Presentations and contributions by stock assessment scientists from NEFSC, Council Staff, and external participants were uniformly high quality. Jason Didden consulted with the NEFSC and SSC on an ongoing basis to improve the information necessary for Atlantic Mackerel discussions. Kiersten Curti, NEFSC, provided timely responses on rebuilding alternatives for Atlantic Mackerel rebuilding projections. Their professionalism greatly facilitated the work of the SSC. A special thanks to Brandon Muffley who guided the SSC's work before, during, and after the meeting.

Within the SSC, David Secor's contributions were substantial both for Atlantic Mackerel and the review of wind energy impact studies. His scholarship is greatly appreciated. Tom Miller served as rapporteur for the challenging discussions on Atlantic mackerel rebuilding. I thank

Sarah Gaichas for her excellent meeting notes and members of the SSC and Council Staff for their comments on an earlier draft of this report

All documents referenced in this report can be accessed via the SSC's meeting website <https://www.mafmc.org/ssc-meetings/2021/september-7-8>. This report uses many acronyms: a comprehensive guide is listed in Attachment 5.

## **Overview of SSC Process for ABC Determination**

The determination of Acceptable Biological Catches (ABC) is perhaps the most important task of the SSC. The following paragraphs borrow heavily from our report to the Council in August because they explain upcoming challenges of rebuilding for some stocks.

The process for undertaking SSC reviews of stock assessments prepared by the Northeast Fisheries Science Center (NEFSC) is guided by the Terms of Reference (TORs). The TORs are written by Council staff in consultation with Council and SSC leadership. The primary focus of the SSC review is to characterize the full scientific uncertainty of the overfishing limit (OFL) to recommend an ABC. Simulation studies have suggested that the uncertainty of catch estimates is underestimated by the within-model estimates of variation (SSC, 2016). Accordingly, the SSC uses a composite level of uncertainty, or coefficient of variation (CV) derived by following a template described in the SSC's [OFL CV Guidance Document \(2020\)](#). Nine criteria are considered to develop an overall measure of the coefficient of variation. The SSC assigns each criterion one of three specified levels of CV and a composite CV, based on the preponderance of the evidence. The rationale for each criterion is summarized for Atlantic Mackerel in Attachment 4.

The SSC is acutely aware of the importance of its ABC determination. The SSC strives to use a process to derive the OFL CV (Attachment 3) that is open, transparent, and well documented. Prior to the meeting, the SSC's lead for each species collaboratively developed a template of key factors for each criterion. The initial results were provided on the Council's website prior to the SSC meeting. No determinations of CVs are made in this stage. Rather, these initial lists served as template for the broader SSC discussions during which factors were modified, added, or deleted. After a plenary discussion, a consensus determination of CV category was made for each criterion. Finally, an overall determination of the OFL CV was derived based on the overall evidence. No formal weighting of criteria was applied; instead, it was based on the SSC's expert judgement. To date, the overall determination has usually been clear-cut. More difficult decisions could arise in the future as assessment circumstances change. Overall, the process strikes a realistic balance between ensuring transparency and efficiency. The advance preparation also ensures that previous discussions are reviewed for current applicability, that group decisions can be made within a limited period, and that future decisions will have sound documentation.

The same principles apply to the Terms of Reference. Apart from minor editorial changes, the summary of the Terms of Reference herein, and the worksheet for determining the OFV CV (Attachment 4) are exactly as presented in the public meeting.

## **National Standard 1 Technical Memo: ACLs for Data-Limited Stocks**

Data-limited stocks pose a challenge to both scientists and managers across the United States. Compliance with the provisions of the MSA are especially difficult when measures of true status are compromised by lack of data and scientific understanding. The MSA allows for flexibility in the determination of Annual Catch Limits for data-limited stocks; the flexibilities are known as “the (h)(2) flexibilities” pursuant to 50 CFR 600.310(h)(2). Marian Macpherson of the Office of Science and Technology presented an overview of the current draft guidelines for setting ACLs. The “flexibilities” include specification of ACLs in terms of numbers caught rather than total weight and consideration of rate-based ACLs wherein some measure of rate of change in relative status or some metric of exploitation can be estimated. For example, changes in average length may be useful for some stocks as a measure of exploitation level.

Marian Macpherson’s presentation was followed by a robust discussion by the SSC. Jason Cope, NMFS, who has been involved with developing technical details of the guidelines assisted in addressing the SSC’s concerns. Metrics that rely on attributes of the population (e.g., length composition) also rely heavily on proper sampling designs and proper interpretation of observations. NMFS staff acknowledged these concerns. SSC members also noted the difficulty of maintaining a consistent level of risk across stocks. It was noted that risk is typically highest for those stocks with the least information. Such risks also imply tradeoffs that may extend to other species. This suggests the value of considering ecosystem considerations in the ACL process. The NMFS is reviewing the legal constraints on such approaches.

The NMFS presentation relied on various decision flow charts. It was noted that in many instances the ACL would be based on less than desirable levels of information. One SSC member noted that the scientific literature is far from settled with respect to the utility of many Data Limited Methods. In many instances, simulation testing has revealed poor performance of once promising methods, especially those that rely only on catch.

### **Chub Mackerel**

Chub Mackerel is a data poor stock managed by the MAFMC. Chub Mackerel are thought to be an important component of the diets of tunas and billfish. Walt Golet of the University of Maine led off with a detailed presentation on the diet composition of tunas and billfishes. Fish stomachs were obtained from various recreational fishing tournaments in the Mid-Atlantic and elsewhere. Rarefaction curves were used to estimate the completeness of the dietary sampling in which the number of unique species in the diet levels off as the number of samples increases; this indicates that the existing samples may be sufficient to describe the overall diet. Chub Mackerel were found to be rare diet components in most of the predator species but *Illlex* and related squid species dominated their stomach contents. Genetic bar-coding methods proved to be valuable for identifying species that digest rapidly in the stomachs of fishes whose body temperatures can be warmer than ambient. While valuable, such methods can be misleading when they reflect items that may have been ingested initially by the prey. Digestion rates, *per se*, are not well known so full interpretation of diet compositions can be challenging. Another complication is the retention of hard and undigestible parts, such as squid beaks, in the stomachs. Dr. Golet’s comprehensive diet study provides useful context for making catch recommendations.

Julia Beaty, MAFMC, provided an overview of the current specifications for Chub Mackerel. The current ABC of 2,300 mt relies heavily on historical landings. Chub Mackerel are rare in MRIP intercepts and the PSEs of recreational catches are high (~60%). Average weights of landed fish are about a pound but no information on discard weights is available. Chub Mackerel were only added to the MAFMC's formal species list in 2017. A commercial industry representative noted that Chub Mackerel swim fast and relatively few vessels have sufficient power to catch them. Moreover, they tend to be a secondary target, especially for vessels fishing for *Illex*.

The SSC noted that much additional data are needed, starting with more intensive monitoring of landings for size and age composition. Presently there is insufficient scientific evidence to increase or decrease the current ABC. However, it was noted that Chub Mackerel is an Atlantic-wide species with productive fisheries in many areas. The SSC encouraged a review of these fisheries and a closely-related Pacific species, *Scomber japonicus*, for their relevance to the Mid-Atlantic region.

The SSC found no reasons to revise the previous ABC recommendation of 2,300 mt. The SSC looks forward to receiving more information on this fishery in 2022.

## **Review of Thread Herring Exempted Fishing Permit**

Lund's Fisheries has applied for an Exempted Fishing Permit (EFP) to harvest 3,000 mt of Thread Herring in 2022. The Council asked the SSC to evaluate the biological implications of the harvest and scientific merits of the proposal. The SSC received a copy of the proposal prior to the meeting. Jeff Kaelin, Lunds Fisheries, provided a broad overview of the proposal and expressed willingness to revise the document as necessary to improve its utility for future science and management. Robert Leaf will serve as an advisor for the collection of fishery and biological information. It is anticipated that about 70 trips would be taken. One of the benefits of this fishery would be the collection of basic biological data prior to the start of any directed fishery in the Mid-Atlantic region. The SSC noted the value of having early biological information on size and age composition which would avoid the lacunae that impede the scientific basis for management Chub Mackerel (see above).

Portside monitoring of Thread Herring landings was considered another strong point as it would allow for monitoring of bycatch of non-target species. However, it is considered unlikely that at-sea observer coverage would be increased to cover more than a nominal number of trips. Lund's Fisheries noted additional willingness to take biological samples at sea at the tow level of resolution. SSC members noted that monitoring of body fat content would be valuable for corroborating trends seen in other forage species. All trips will be responsible for filing electronic VTR reports and other reporting requirements may apply.

Thread Herring is primarily a southern species with evidence of intermittent abundance in Chesapeake Bay in the mid-1990s to 2000. Contemporary data from existing fishery-independent sampling programs are scant. SSC members asked for updates on Thread Herring presence from NEAMAP and other state surveys. The Audubon Society has expressed concerns about capture of forage important to seabirds, but the provided references actually showed very few Thread Herring in seabird diets in the region. It was unclear whether there are concerns

about seabird bycatch, but proposers noted that relatively few sea birds are present in the 30 fathom depth areas where the fishery would be prosecuted. Monitoring for bycatch of birds and marine mammals is encouraged.

Overall, the SSC found no scientific basis for opposing this proposal. The collection of biological and fine-scale fishery performance information at the start of any fishery was viewed as valuable for future scientific management. Moreover, such collections are consistent with the guidelines proposed under NS1 guidelines for Data Limited stocks. Careful consideration should be given to designing a basis for estimation of scientific uncertainty and future management of this resource.

## **Spiny Dogfish**

Jason Didden provided an overview of the fishery in 2020 and reported an update on female Spiny Dogfish spawning stock biomass and recruitment from the 2021 NEFSC spring bottom trawl survey. The current assessment model relies heavily on the spring survey as it is thought to represent a greater fraction of the resource than the fall survey. The fall survey occurs when a substantial fraction of resource is in Canadian waters. The loss of the 2020 survey and missing strata in other recent years increases the uncertainty in the management of this species.

Landing and prices generally declined in 2020 and fishery landings are slow in 2021. These patterns were attributed to COVID-19 and market effects rather than patterns of abundance. Some fleets are transitioning to more profitable fisheries, such as shrimp in Virginia and skates in Massachusetts.

Council staff expressed some concern that survey-based estimates of female spawning stock abundance appeared to down slightly and there was no evidence of a strong year class in 2021. It was noted that the swept area biomass estimate for 2021 would have been higher if the southern strata had been fully sampled. The SSC noted that the age-length relationship for spiny dogfish was based on research efforts nearly 40 years ago. Since then, the best basis for aging has been indeterminate with both spines and vertebrae considered as definitive. However, the most recent data suggest spines may be best. It was suggested that an exchange of samples with DFO Canada would be valuable. Investigators there have validated aging through the presence of radionuclides in samples from the early 1960's. Such samples could be invaluable for current age reading research. Efforts to update the underlying von Bertalanffy growth model were strongly supported by the SSC. A Research Track Assessment is planned for 2022 that potentially could result in an alternative modeling approach.

## **Atlantic Mackerel Rebuilding**

In July, the SSC began an in-depth discussion of the most recent Management Track Assessment and the challenges of rebuilding this depleted stock. Those discussions continued at this September meeting. At this meeting, the SSC received more extensive and specific Terms of Reference related to the rebuilding process and specification of Council goals. One of the most challenging aspects of rebuilding has been reconciliation of longer-term goals of rebuilding with recent trends in recruitment. The  $B_{msy}$  estimates are based on a long-term time series of recruitment levels (1975 onward). Recruitments since 2009 have been below the median with

the exception of the 2015-year class. It is not known whether the low recruitments are due to low stock size, poor environmental conditions, or both factors. If current low levels of recruitment persist, then the reductions in recommended landings will be greater and the rebuilding period will be longer. If recruitment is low due to low stock size, then reducing  $F$  initially to increase stock size may accelerate population growth over time and lead to progressively higher yields. If low recent recruitment is simply bad luck, then the stock may recover more quickly and catch reductions will be less severe. Hence the trajectory of recovery relies on factors that cannot currently be distinguished.

This session began with an overview of Council decisions in August regarding rebuilding. Jason Didden, MAFMC, reported that the Council had requested emergency action to reduce the ABC in 2021 and 2022 to 15,512 mt. While these levels will result in continued overfishing, they are allowed when a rebuilding program is being revised. The SSC noted that its earlier nonbinding recommendations for ABCs for 2021-22 were not accepted.

The Council specified a rebuilding time period of 10 years and requested evaluation of rebuilding plans which have success probabilities of 50, 60, and 75%. Finally, the Council requested an evaluation of rebuilding using the  $P^*$  method. The  $P^*$  method dynamically adjusts catch limits in response to the size of population and acceptable risk of overfishing as set under the Council's risk policy.

Kiersten Curti, NEFSC, provided an overview of projection scenarios consistent with these policy choices. All of the projections begin with the assessment model's terminal year distribution of population sizes. In addition, all projections use the followed series of catch for 2020 to 2022: 18,038 mt, 15,512 mt, 15,512 mt, respectively. Rebuilding policies are assumed to begin in 2023. The major challenge for evaluation of rebuilding strategies is the assumption of future recruitment levels. For short term forecasts consistent with Council quota specifications, the NEFSC generally assumes that recruitment is independent of stock size. Unless conditions suggest otherwise, it is assumed that the entire time series of recruitment estimates is still valid. The SSC discussed the implications of alternative assumptions about recruitment. The three main hypotheses were 1) long-term (1975 onward), 2) short-term (2009 onward) and 3) some form of density dependence. Hypothesis 1 assumes no underlying change in stock dynamics from either stock size or environmental change. Hypothesis 2 assumes a change has occurred but no causal mechanism is identified. Hypothesis 3 assumes that a change has occurred and that low stock size is the primary cause. The SSC discussed these hypotheses in detail as described below.

The SSC acknowledges the exemplary support of Kiersten Curti who not only provided the set of projection scenarios requested but was able to update those scenarios during the meeting in response to SSC requests. Jason Didden and Dave Secor were instrumental in structuring the rebuilding problem and guiding the SSC discussions.

### **Terms of Reference: Atlantic Mackerel**

Following this general discussion, the SSC addressed the Terms of Reference (*italics*) for Atlantic Mackerel. Responses by the SSC (standard font) to the Terms of Reference provided by the MAFMC are as follows:



*For Atlantic Mackerel, the SSC will provide a written statement that identifies the following:*

- 1) *Given the most recent mackerel assessment, provide best science recommendations regarding recruitment assumption(s) for rebuilding projections and approaches to achieve stock rebuilding in 10 years with 50%, 60%, and 75% probabilities, including what  $F_{rebuilds}$  are most consistent with the target rebuilding probabilities;*

Recommendation for  $F_{rebuild(s)}$ :

Key Considerations:

- The SSC does not find support for the use of unconstrained recruitment estimates drawing from the entire 1975-present time series.
- The SSC recognizes that rebuilding plans are re-evaluated every two years, and the Council will likely require an adaptive approach that responds to survey and biological data.
- The SSC offers two recruitment assumptions as being defensible and supported by the data: a two-phase approach that explicitly incorporates the entire time series (1975 onwards), with the empirical odds of being in different phases and alternatively, the use of the most recent recruitments (2009- onwards). The two-phase approach is associated with faster rebuilding times, while the recent recruitment approach is associated with slower rebuilding.
  - Two-phase approach derived from an analysis conducted intersessionally by SSC Chair Paul Rago, which considers likely recruitment levels above and below the  $\frac{1}{2} B_{MSY}$  level.
    - Benefits
      - Recognizes the potential for escaping current low level of recruitment (2009-onwards). The characterization of low recruitment is a “short-term” perspective.
      - Recognizes the potential for positive impacts of biomass accumulation
      - If the stock does not rebuild, the method “locks in” the current recruitment level
      - Implicitly recognizes a stock size influence on recruitment
    - Costs
      - Assumes an explicit threshold for an effect of stock size on recruitment, which is unlikely
      - The threshold can have unexpected effects later on with respect to stock rebuilding
      - The threshold is sensitive to the timing of a pulse of strong recruitment and may not reflect longer-term SSB rebuilding.
      - We are relying on a SSB-based boost to recruitment that has not been observed recently (since 2007).
      - The two-phase approach effectively defines a S-R relationship, which may be arbitrary
      - This approach is novel and potentially precedent building.
  - Recent phase approach depends on recruitment draws from 2009-onwards.
    - Benefits
      - Reflective of empirical evidence that low recruitments have been

observed recently, and thus are assumed to be most likely observed going forward.

- Recent strong year classes are less strong than has been the case historically.
  - Ensures future catches are scaled appropriately to recent conditions.
  - The approach is the more precautionary of the two recruitment scenarios. If good recruitments do occur at low stock sizes, rebuilding time lines can be adjusted quickly.
- Costs
    - If we believe recent recruitments are now the norm, we must ask whether current reference points are reliable. This brings into question rebuilding goals.
  - The SSC discussed the relative merits of each approach. The SSC noted evidence that across fish stocks globally, rebuilding was generally observed; and that regime shifts and changes in productivity were common. These observations suggest that a model allowing for higher recruitments is warranted. In contrast, the SSC also noted that the recent recruitment assumption is parsimonious and precautionary.

2) *Provide OFL CV and recruitment assumption recommendations so that a standard risk policy  $P^*$  ABC calculation can be made, as well as advice on how long  $P^*$  would take to rebuild the stock (if practicable at this time);*

***Note for ToR #1 and #2 above:*** based on Council input, regarding an emergency action request, and consideration of likely rebuilding implementation timing, assume the initiation of rebuilding (via  $F_{rebuild}$  or  $P^*$ ) is January 1, 2023 with catches of 15,512 MT for 2021 and 2022.

Based upon the 2021 Atlantic Mackerel OFL CV Decision Criteria Table, the SSC recommends to use the 150% OFL CV. Key elements for the SSC's rationale for OFL CV of 150% include:

- Uncertainty in natural mortality, which is likely age and time-varying for this pelagic forage species.
- High likelihood that unknown ecosystem factors were affecting phase associations of recruitment, SSB, F, and projection performance.
- High uncertainty in the relationship between recruitment and SSB and what period of recruitment to use in stock rebuilding projections.

Despite the 150% OFL CV assignment, SSC maintains strong confidence in the current stock assessment model and most data inputs.

3) *The most significant sources of scientific uncertainty associated with a determination of rebuilding ABCs;*

- The appropriate time period of recruitment that forms the basis of projections is highly uncertain as a result of alternative plausible hypotheses regarding the cause of recent

low recruitments, and their influence on likely future recruitment. This drives inferences about rebuilding times, OFLs, and ABCs;

- Conversion of egg survey results to the spawning stock biomass estimate;
- The assessment is sensitive to the distribution of Atlantic Mackerel, which has been changing and may continue to change;
- Trawl survey representation of abundance and age structure;
- The assumption of fixed natural mortality rate and data gaps associated with major predators of mackerel;
- The importance of recreational harvests in mackerel dynamics introduces uncertainty in the assessment over the scale of the population.
- Missing catch information from Canadian bait and recreational fisheries, and commercial discards. From DFO rule publication earlier this year: “It has been estimated by DFO Science that there could be between 2 000 and 5 000 metric tons of unreported catches per year, which includes fishing mortality from various sources, notably recreational and some unreported commercial (including bait) harvests, discards and other mortalities. These unreported catches could potentially undermine the validity of DFO's Atlantic mackerel stock assessment, a concern that has been consistently raised by the Atlantic Mackerel Advisory Committee.” <https://gazette.gc.ca/rp-pr/p1/2020/2020-10-10/html/reg2-eng.html>

4) *Ecosystem considerations accounted for in the stock assessment, as appropriate, and any additional ecosystem considerations that the SSC deems relevant for consideration in determining rebuilding ABCs;*

- The SAW 64 did not explicitly account for predation mortality in the assessment. Ancillary analysis contained as a working document and considered by the working group indicated low incidence in the diets of fishes sampled within the NEFSC bottom trawl survey. Predation by highly migratory species, e.g., sharks, marine mammals, and birds remains unknown.
- Working papers prepared for SAW 64 addressed habitat changes, changing availability, and changes to the fishery. The information contained in the working papers provided useful background for the assessment and contributed to the model identification process, as well as the decision on which portion of the recruitment time series to use.
- The ecosystem criterion was considered and given emphasis in the determination of the OFL CV.

5) *Research recommendations that would reduce the scientific uncertainty in determining rebuilding ABC recommendations and/or could be considered for the 2023 management track assessment, including advice related to identifying whether regime changes have occurred that could warrant calculating reference points with recruitment time series other than currently used (1975-terminal year).*

- The SSC supports all of the recommendations from SAW/SARC 64. **In particular, the SSC recommends continuing the U.S. component of the Atlantic Mackerel**

**egg survey so that the range-wide egg index can be updated and used in future assessments.** This recommendation requires a continuation of the work done to identify and quantify Atlantic Mackerel eggs collected in the survey. Continuing collaboration with both the fishing industry and Canadian scientists to maintain the assessment is also recommended by the SSC.

- An investigation of stock - environment – recruitment interactions that may provide insight into the likely distribution of future recruitments, and possibly biological reference points.
- Evaluation of time and age-variant M and M2 (predation mortality) for this stock
- Further evaluate how error in the egg survey propagates to error in the spawning stock biomass index
- Evaluating US recreational fishery data quality and assessment sensitivity

## **Offshore Wind Fishery Impact Studies in the Mid-Atlantic**

The SSC heard from offshore wind energy fishery scientists on early impact monitoring efforts. Drew Carey (Inspire Environmental) described past BACI work at US's first offshore wind project – Block Island, highlighting lessons learned and guidance for future project monitoring. These included: (1) early engagement of stakeholders to understand their concerns and key views on offshore wind impacts; (2) implementation of good survey design elements such as BACI; (3) limits on the detectability of statistically significant effects when using traditional fishing gears such as otter trawls. Proper design allows application of more rigorous statistical methods to extract comparisons among areas or over time. Daphne Munroe (Rutgers University) presented a regional model forecasting changed patterns of effort and revenue streams to the US surf clam industry. This work generated substantial interest by SSC as an approach that provided multi-scaled outputs (region, port, fleet) on offshore wind impacts and one that could be applied to other stocks. This integrated simulation model mimics the fishing behavior of individual vessels over time and spatial units in response to impacts related to exclusion from and passage through wind energy development areas. Fishing behaviors included search time, distance to port, communication among vessels and processing plant economics. Interviews with fishermen were essential for properly parameterizing the model. Greg DeCelles (Orsted) presented perspective on ways to align and standardize monitoring across multiple projects, drawing in part from ROSA's recent monitoring guidance document and emphasizing data sharing. He provided an example of regional assessment opportunities to do multi-scaled biotelemetry research. Elizabeth Methratta (NMFS) provided key considerations in monitoring programs highlighting issues of design, scale, innovation, and hypothesis-driven science.

Some key discussion points among SSC and other attendees included: what can be learned and tested by using historical data on Gulf of Mexico (petro structures) and EU (20+ year offshore wind development); post-construction period for monitoring longer term effects; potential negative interactions between scientific monitoring and fishing activities, including safety issues; and how can we evaluate changed fishing effort patterns given current limitations in VTR and vessel monitoring data.

Julia Beatty, MAFMC, provided an introduction to data available through a NMFS website to evaluate spatial overlap and possible consequences to lost revenue. There was support to

investigate ways of supporting this and other updates on stock-specific offshore wind impacts through NEFSC Annual State of the Ecosystem Report. SSC members noted that future restrictions on gear deployment caused by wind energy sites would likely degrade data quality of surveys used in stock assessment models and increase the coefficient of variation applied to the OFL.

Public comments highlighted some of the externalities of deployment of monitoring gear near monitoring sites that are currently in areas actively fished. Passive outreach to industry would not be sufficient to counteract some of the recent problems encountered. Others noted that it is necessary to take a long-term perspective on such projects including monitoring from construction through decommissioning.

## **Economic Working Group Activities**

Geret DePiper, Economic Working Group chair, provided an overview of activities by the Economics Working Group since July. The key focus of the Working Group has been to assist the Council, GARFO, and NEFSC in laying a new basis for the Research Set Aside (RSA) program. The Research Steering Committee of the Council began a year-long process to envision a new RSA program. Critical aspects of this process include: (1) research priorities, (2) mechanisms for raising funds, and (3) monitoring and enforcement.

Following a successful initial review of research priorities on July 15, 2021, the Econ WG supported a second day-long webinar on August 31 to examine the positive and negative aspects of alternative methods for raising funds for research. The leading alternatives include some form of auction and bilateral arrangements between harvesters and researchers. The auction process has many economic efficiency advantages, but simulation results showed that these advantages are dissipated as additional regulatory complexities are superimposed. Additional presentations by past participants in the RSA program gave a good overview of practical considerations.

A third webinar focusing on monitoring and enforcement issues is planned for October 14. This will be followed by an in-person meeting in early 2022 to summarize results and make final recommendations for consideration by the Council at its April 2022 meeting.

## **Ecosystem Working Group Activities**

Each year the SSC and Council receive a State of the Ecosystem (SOE) report that summarizes multiple trend indices for biological, oceanographic, social and environmental variables. The Ecosystem Working Group was formed by the SSC to translate the important findings of the SOE into operational decisions about catch limits. The Working Group had its first meeting on August 4. Sarah Gaichas, Ecosystem Working Group chair, provided an overview of the meeting and the mission of the Working Group. A primary focus of the group will be distillation of factors affecting the OFL CV determination. The SSC noted that Atlantic Mackerel might be an ideal candidate to examine given the difficulties of identifying causal factors for recent recruitment trends. Simulation analyses and full management strategy evaluations (MSEs) and the like may prove useful for identifying appropriate management advice under such uncertainty. Others noted that an ongoing meta-analysis study of factors affecting the OFL-CV is now

underway; this could be useful for guiding the Working Group. The SSC responded positively to the initial report of the Working Group and looks forward to continued progress in 2022.

## **Other Business**

### **Research Track Assessment Schedule and Priorities**

Brandon Muffley, MAFMC, provided an overview of the planned Research Track Assessments (RTA) through 2026. The SSC noted the RTA related to consideration of ecosystem and climate info in the stock assessment process should be coordinated with the Ecosystem Working Group to avoid duplication of effort. Using only a single stock as a case study might be a good way of focusing efforts.

The 2022 assessment schedule will be crowded as both the *Illlex* and Butterfish RTAs have been delayed until March of 2022. Atlantic Mackerel will likely be revisited by the SSC at its March 2022 meeting. The State of the Ecosystem report will also be received in March.

SSC members noted that despite the inefficiencies of Webinar-based meetings, there were some significant advantages related to greater participation and reduced total time for meetings and travel. Members noted the value of the intensive engagement and collaborative teamwork of in-person meetings and recommended at least one such meeting in 2022. The July meeting that deals with specifications for multiple stocks might be the most likely candidate.

### **Miscellaneous Topics**

The National SSC meeting will be held in August 2022 in Sitka, AK with a focus on incorporating ecosystem factors into stock assessments and management. The steering committee is looking for case studies from each region. More details will be forthcoming before the end of the year.

The SSC has emphasized the challenges of developing rebuilding plans and emphasized the need for collaboration among managers, regulators, and scientists. Such collaboration will require a formal meeting to allow for sufficient understanding of perspectives and constraints. The SSC will be working with Council staff to begin this process in the coming months.

**Attachment 1**



**Mid-Atlantic Fishery Management Council  
Scientific and Statistical Committee Meeting**

September 7 – 8, 2021 via Webinar

**Webinar Information**

(Note: same information for both days)

Link: [September 2021 SSC meeting](#)

Call-in Number: 1-844-621-3956

Access Code: 179 703 0419##

**AGENDA**

**Tuesday, September 7, 2021**

- 9:30 Welcome/Overview of meeting agenda (P. Rago)
- 9:35 National Standard 1 Technical Guidance Memo – ACL’s for Data-Limited Stocks
- Overview and background of Technical Guidance memo (M. Macpherson, NMFS)
  - Discussion, feedback, and comments from SSC
- 10:00 Chub mackerel 2022 ABC review
- Data and fishery update; review of previously recommended 2022 ABC (J. Beaty)
  - Review of Chub Mackerel diet study (W. Golet, Univ. of Maine)
- 11:10 Break
- 11:20 Thread Herring Exempted Fishing Permit (EFP)
- Overview of Draft EFP proposal (J. Beaty and J. Kaelin/E. Bochenek)
  - Discussion, feedback, and comments from SSC
- 12:30 Lunch
- 1:30 Spiny Dogfish 2022 ABC review
- Data and fishery update; review of previously recommended 2022 ABC (J. Didden)
  - Update on 2022 Research Track assessment
- 2:15 Atlantic Mackerel Rebuilding ABC Specifications

- Review of Council rebuilding alternatives and request to SSC (J. Didden and K. Curti)
  - Considerations for rebuilding projections (D. Secor)
  - SSC recommendations (D. Secor)
- 3:30 Break
- 3:40 Continue mackerel rebuilding discussion
- 5:30 Adjourn

**Wednesday, September 8, 2021**

- 8:30 Offshore Wind Fishery Impact Studies in the Mid-Atlantic
- Block Island Monitoring Experience: Changes in Fish Densities and Recreational Fishing (D. Carey, Inspire Environmental)
  - Understanding Economic Impacts to the Commercial Surfclam Fishing Industry from Offshore Wind Energy Development (D. Monroe, Rutgers University)
  - Alignment to Promote a Regional Approach to Fisheries Monitoring (G. DeCelles, Orsted Offshore North America)
  - What Does a Good Fishery Resource Monitoring Plan Contain (E. Methratta, Northeast Wind Team, NEFSC)
  - Developing potential SSC fishery information products to evaluate changing fishing and offshore wind interactions (J. Beaty)
  - Discussion - How do we move from project-scaled impact studies to regional-scale studies?
- 10:30 Break
- 10:45 SSC Work Group Updates
- Economic Work Group – Review of RSA Workshop (Funding) and next steps
  - Ecosystem Work Group – Overview and approaches from Work Group meeting #1
- 11:45 Other Business
- Research Track Assessments schedule – potential 2027 priorities
  - Planning and potential priorities for 2022
- 12:30 Adjourn

Note: agenda topic times are approximate and subject to change



## Attachment 2

### MAFMC Scientific and Statistical Committee September 7-8, 2021

#### Meeting Attendance via Webinar

#### Name

#### Affiliation

#### *SSC Members in Attendance:*

Paul Rago (SSC Chairman)	NOAA Fisheries (retired)
Tom Miller	University of Maryland – CBL
Ed Houde	University of Maryland – CBL (emeritus)
Dave Secor	University of Maryland – CBL
John Boreman	NOAA Fisheries (retired)
Lee Anderson	University of Delaware (emeritus)
Jorge Holzer	University of Maryland
Yan Jiao	Virginia Tech University
Rob Latour	Virginia Institute of Marine Science
Brian Rothschild (Sept. 8 only)	Univ. of Massachusetts – Dartmouth (emeritus)
Olaf Jensen	Rutgers University
Sarah Gaichas	NOAA Fisheries NEFSC
Wendy Gabriel	NOAA Fisheries (retired)
Mike Wilberg (Vice-Chairman)	University of Maryland – CBL
Cynthia Jones	Old Dominion University
Gavin Fay	U. Massachusetts—Dartmouth
Alexei Sharov	Maryland Dept. of Natural Resources
Geret DePiper	NOAA Fisheries NEFSC

#### *Others in attendance (only includes presenters and members of public who spoke):*

Kiersten Curti	NEFSC
Jason Didden	MAFMC staff
Brandon Muffley	MAFMC staff
Doug Christel	GARFO
Bonnie Brady	Long Island Commercial Fisheries Assoc
Julia Beaty	MAFMC staff
Jeff Kaelin	Lunds Fisheries
James Fletcher	United National Fisherman's Assoc.
Eleanor Bochenek (Sept 7 <sup>th</sup> only)	Rutgers University (retired)
Robert Leaf (Sept 7 <sup>th</sup> only)	University of Southern Mississippi
Marian Macpherson (Sept 7 <sup>th</sup> only)	NMFS
Jason Cope (Sept 7 <sup>th</sup> only)	NMFS
Drew Carey (Sept 8 <sup>th</sup> only)	Inspire Environmental
Daphne Munroe (Sept 8 <sup>th</sup> only)	Rutgers University
Greg DeCelles (Sept 8 <sup>th</sup> only)	Ørsted
Elizabeth Methratta (Sept 8 <sup>th</sup> only)	NMFS

Attachment 3

OFL CV Decision Table Criteria (updated June 2020)

Decision Criteria	Default OFL CV=60%	Default OFL CV=100%	Default OFL CV=150%
<b>Data quality</b>	One or more synoptic surveys over stock area for multiple years. High quality monitoring of landings size and age composition. Long term, precise monitoring of discards. Landings estimates highly accurate.	Low precision synoptic surveys or one or more regional surveys which lack coherency in trend. Age and/or length data available with uncertain quality. Lacking or imprecise discard estimates. Moderate accuracy of landings estimates.	No reliable abundance indices. Catch estimates are unreliable. No age and/or length data available or highly uncertain. Natural mortality rates are unknown or suspected to be highly variable. Incomplete or highly uncertain landings estimates.
<b>Model appropriateness and identification process</b>	Multiple differently structured models agree on outputs; many sensitivities explored. Model appropriately captures/considers species life history and spatial/stock structure.	Single model structure with many parameter sensitivities explored. Moderate agreement among different model runs indicating low sensitivities of model results to specific parameterization.	Highly divergent outputs from multiple models or no exploration of alternative model structures or sensitivities.
<b>Retrospective analysis</b>	Minor retrospective patterns.	Moderate retrospective patterns.	No retrospective analysis or severe retrospective patterns.
<b>Comparison with empirical measures or simpler analyses</b>	Assessment biomass and/or fishing mortality estimates compare favorably with empirical estimates.	Moderate agreement between assessment estimates and empirical estimates or simpler analyses.	Estimates of scale are difficult to reconcile and/or no empirical estimates.
<b>Ecosystem factors accounted</b>	Assessment considered habitat and ecosystem effects on stock productivity, distribution, mortality and quantitatively included appropriate factors reducing uncertainty in short term predictions. Evidence outside the assessment suggests that ecosystem productivity and habitat quality are stable. Comparable species in the region have synchronous production characteristics and stable short-term predictions. Climate vulnerability analysis suggests low risk of change in productivity due to changing climate.	Assessment considered habitat/ecosystem factors but did not demonstrate either reduced or inflated short-term prediction uncertainty based on these factors. Evidence outside the assessment suggests that ecosystem productivity and habitat quality are variable, with mixed productivity and uncertainty signals among comparable species in the region. Climate vulnerability analysis suggests moderate risk of change in productivity from changing climate.	Assessment either demonstrated that including appropriate ecosystem/habitat factors increases short-term prediction uncertainty, or did not consider habitat and ecosystem factors. Evidence outside the assessment suggests that ecosystem productivity and habitat quality are variable and degrading. Comparable species in the region have high uncertainty in short term predictions. Climate vulnerability analysis suggests high risk of changing productivity from changing climate.
<b>Trend in recruitment</b>	Consistent recruitment pattern with no trend.	Moderate levels of recruitment variability or modest consistency in pattern or trends. OFL estimates adjusted for recent trends in recruitment. OFL estimate appropriately accounted for recent trends in recruitment.	Recruitment pattern highly inconsistent and variable. Recruitment trend not considered or no recruitment estimate.
<b>Prediction error</b>	Low estimate of recent prediction error.	Moderate estimate of recent prediction error.	High or no estimate of recent prediction error.

<b>Assessment accuracy under different fishing pressures</b>	High degree of contrast in landings and surveys with apparent response in indices to changes in removals. Fishing mortality at levels expected to influence population dynamics in recent years.	Moderate agreement in the surveys to changes in catches. Observed moderate fishing mortality in fishery (i.e., lack of high fishing mortality in recent years).	Relatively little change in surveys or catches over time. Low precision of estimates. Low fishing mortality in recent years. "One-way" trips for production models.
<b>Simulation analysis/MSE</b>	Can be used to evaluate different combinations of uncertainties and indicate the most appropriate OFL CV for a particular stock assessment.		

Attachment 4

SSC-Approved OFL CV Decision Table for Atlantic Mackerel – Sept. 2021

Decision Criteria	Summary of Decision Criteria Considerations	Assigned OFL CV Bin (60/100/150)
<b>Data quality</b>	<p><b>Surveys</b>  <i>Synoptic surveys are available but recent low index values contribute imprecision to estimates of SSB. Survey and landings catch-at-age data showed cohort progression of the 2015 year-class.</i></p> <ul style="list-style-type: none"> <li>• The assessment relies heavily on an SSB index derived from egg surveys in both Canadian and US waters. Estimated egg production declined &gt;90% from the 1980s to the 2010s. Since 2010, egg production has remained at historically low levels with a slight increasing trend in recent years. Since 2000, spawning habitats have contracted remarkably in both the US and Canada (DFO 2017; Richardson et al. 2020). During this period, low egg incidence in surveys, and persistently low index values contribute uncertainty to inferences on low magnitude changes.</li> <li>• The assessment considers separate NEFSC spring bottom-trawl time series for the RV Albatross (1975-2008) and the RV Bigelow (2009-2019). Albatross index values exhibited a trend opposite to the SSB index, but analyses suggest that model results are relatively insensitive to the Albatross series. The Bigelow series exhibited abundance and age structure trends consistent with a strong 2015 year-class.</li> <li>• In both vessel series, strong cohorts progressed across years as expected, but cohort progression was occasionally inconsistent for weaker year-classes.</li> </ul> <p><b>Landings and discards</b>  <i>Landings data are of moderate certainty. High certainty in US and Canadian commercial landings is offset by unexpected trends in the revised MRIP data and unknown Canadian discards and bait and recreational catches.</i></p> <ul style="list-style-type: none"> <li>• Canadian discards, bait and recreational catches are unknown but likely an important fraction of combined Canada-US catch in recent years. A recent MSE (Van Beveren et al. 2020) concluded that this was a chief source of uncertainty in rebuilding the Northern contingent.</li> <li>• Revised MRIP estimates of recreational catches and discards in the MT assessment resulted in higher estimates especially in recent years; revised estimates increased nearly two-fold for the period 2008-2019. During 2015-2019, recreational catch comprised 34.7% of total US harvests. MRIP estimates and associated error now have a large influence on overall landings data.</li> </ul>	<b>100%</b>

<p><b>Model appropriateness and identification process</b></p>	<p><i>A single age-structured model supports the assessment. Diagnostics and sensitivity runs indicate moderate deviations associated with parameter errors.</i></p> <ul style="list-style-type: none"> <li>• ASAP is the primary assessment model in the MT. In SAW 64, two alternative age-based models were considered (SAM, CCAM), which yielded similar stock trajectories. The ASAP model met peer review standards for both the benchmark and MT assessments.</li> <li>• Cohort progressions are apparent in both survey and field data, indicating age determinations are likely accurate in support of the ASAP.</li> <li>• Two contingents with origins in Canada and US waters were combined into a single unit stock, supported by evidence of extensive contingent mixing within US winter and spring fisheries.</li> <li>• In SAW 64, over 150 model configurations of the ASAP model were evaluated in a logical progression for model identification and sensitivity.</li> </ul> <p><b>Mortality</b></p> <p><i>Natural mortality is unknown and likely age- and time-variable for this pelagic forage species.</i></p> <ul style="list-style-type: none"> <li>• In the assessment natural mortality is computed based on longevity (life table approach) at <math>M=0.2</math>, invariant with age and over years.</li> <li>• The MT assessment included a likelihood profile analysis that indicated small likelihood differences between <math>M=0.20</math> and <math>M=0.30</math>, with highest likelihood at <math>M=0.25</math>. The continued use of age-invariant mortality was justified based on a simulation exercise on hypothetical stocks (Deroba and Schueller 2013).</li> <li>• Justification for a time-invariant <math>M</math> was the scarcity of mackerel in the NEFSC Food Habitat Database throughout the series and the lack of predation estimates for the northern contingent, especially given the dominance of the northern contingent to overall stock size. Still, demersal predation as indexed by the NEFSC bottom trawl survey may be rare or uncommon for this pelagic species. Overholtz and Waring (1991) suggested that pilot whales and common dolphins are important predators of adult mackerel. These and other mackerel predators may have a dominant role in adult mortality.</li> </ul>	<p><b>60%</b></p>
<p><b>Retrospective analysis</b></p>	<p><i>Moderate retrospective patterns occurred with some anomalous patterns in retrospective peels. Bridge runs showed overall consistency between the benchmark and MT assessments.</i></p> <ul style="list-style-type: none"> <li>• Retrospective patterns in SSB and recruitment were greater in the MT assessment in comparison to the benchmark, with deviating directional bias in 5- year peels for SSB and F. Still, the retrospective-adjusted values for the terminal year fell within the 90% confidence intervals of the unadjusted estimates so a retrospective adjustment in the MT assessment was not warranted.</li> <li>• Bridge runs between the benchmark and MT assessments indicated a negligible change in SSB historical trends and a modest increase F since 2010 owing to the revised MRIP estimates. Bridge runs for the recruitment series continued to support the perception of a strong 2015 year-class.</li> </ul>	<p><b>100%</b></p>

<p><b>Comparison with empirical measures or simpler analyses</b></p>	<p><i>Simpler analyses or empirical measures were not included in the benchmark or MT assessments, but stock trends are supported by ancillary information.</i></p> <ul style="list-style-type: none"> <li>• Catch curve analysis (MT assessment) showed a 2-3 fold increase in total mortality 2000-2015 in comparison to 1975-1999, consistent with higher Fs (or Ms) in the recent period. Severe age-truncation also supports perception of higher F (or Ms) during since 2010.</li> <li>• Decreases in egg incidence since 2000 (Richardson et al. 2020) is consistent with depletion in SSB observed for that same period.</li> </ul>	<p><b>100%</b></p>
<p><b>Ecosystem factors accounted</b></p>	<p><i>No ecosystem factors were considered explicitly in the assessment. Atlantic mackerel phase diagram suggests that stock productivity has changed since 2000. The current depleted state of Atlantic mackerel has unknown ecosystem causes. Large shifts in age structure and possible spatial behaviors have also affected stock productivity in unknown ways.</i></p> <ul style="list-style-type: none"> <li>• The contribution of predation mortality to total mortality (M+F) is unknown. M is prone to age- and time-specific variation owing to predation by pelagic predators. Mackerel are scarce in the NEFSC Food Habitat Database throughout the series and the lack of predation estimates for the northern contingent, especially given the dominance of the northern contingent to overall stock size. Still, demersal predation as indexed by the NEFSC bottom trawl survey may be rare or uncommon for this pelagic species. Overholtz and Waring (1991) suggested that pilot whales and common dolphins are important predators of adult mackerel. These and other predators may have a dominant role in adult mackerel mortality.</li> <li>• Although age-9 fish were observed in the 2019 catch, the stock has shown severe age truncation with ages &gt;3 years scarce in catch and survey samples since 2010. Extreme age-truncation is expected to result in depressed recruitment, decreased population resilience, and increased sensitivity to environmental change (Hsieh et al. 2006; Secor et al. 2015).</li> <li>• US harvests are influenced by contingent mixing (contributions by the Northern contingent), which is dynamic over years and decades (Arai et al. 2021).</li> <li>• Lack of an apparent stock-recruitment relationship suggests recruitments are environmentally driven (Plourde et al. 2015). Larval habitat suitability has shown a long-term decline in major regions of the Southern contingent’s historical range (McManus et al. 2018).</li> <li>• The NEFSC Climate Vulnerability ranking is “moderate” for Atlantic mackerel, with distributional vulnerability and climate exposure ranked high in part owing to the species’ responsiveness to surface oceanographic conditions.</li> </ul>	<p><b>150%</b></p>
<p><b>Trend in recruitment</b></p>	<p><i>Prior to 1975, when stock size was higher, strong recruitments were likely more frequent. Since then, recruitments have been more episodic and declining, with dominant year-classes occurring every 15-20 years. The implications of low recruitments, if continued, may be profound for future stock levels and management reference points.</i></p> <ul style="list-style-type: none"> <li>• High uncertainty in trends in recruitment centers on whether to use recent or historical time series in stock projections.</li> </ul>	<p><b>100%</b></p>

	<ul style="list-style-type: none"> <li>• The 2015 year-class estimate from the MT assessment was 15% lower than the estimate from the 2017 benchmark.</li> <li>• In the benchmark assessment, the strong 2015 year-class provided short-term SSB projections that were biased high. Precaution is advised when short-term projections rely heavily on terminal year recruitment.</li> <li>• The lack of an apparent stock recruitment relationship causes uncertainty on whether BRPs should be derived for the entire historical series or for the selected recruitment time series used in stock projections.</li> </ul>	
<b>Prediction error</b>	<i>Prediction error was not estimated in the benchmark or MT assessments, although bridge runs between the two assessments showed relatively good agreement in total catch, SSB and F trajectories despite revised MRIP estimates. The forecast error for rebuilding by 2023, derived from the 2018 benchmark assessment, was high.</i>	<b>150%</b>
<b>Assessment accuracy under different fishing pressures</b>	<p><i>Historical high amplitude changes in catch levels follow expectations of stock trajectories, but since 2010 a period of stable low catches and SSB is seemingly unaligned with a period of high and declining F.</i></p> <ul style="list-style-type: none"> <li>• Recent catch has been stable and consistently below quota.</li> <li>• Lack of evidence of a strong and repeatable effect of fishing pressure on stock dynamics.</li> <li>• The Atlantic mackerel stock status phase diagram shows that SSB is largely unrelated to F since 2010.</li> <li>• An alternative view is that SSB has shown significant increases in recent years (MT assessment indicates a 179% increase from 2014 (15,318 mt) to 2019 (42,862 mt), which could drive the strong decline in F following the period of high exploitation prior to 2011.</li> </ul>	<b>150%</b>
<b>Simulation analysis/MSE</b>	<i>No formal MSE-type analysis has been conducted for the entire stock. An MSE was conducted for the Northern Contingent (Canada's stock) and indicated high sensitivity of stock trajectories and rebuilding to unreported catch (Van Beveren et al. 2020).</i>	NA

**The SSC consensus was that the Atlantic mackerel stock assessment should be characterized as being associated with a CV of 150%. The SSC holds that despite high quality modeling products, which enable exploration of possible sources of uncertainty, there remains substantial uncertainties over future stock dynamics.**

**Narrative**

The stock phase diagram indicates that SSB has been relatively insensitive to changes in F since 2010. Further, US catches have been stable and below quota for this period. These two elements contribute to uncertainty in the role of F in stock rebuilding and draw attention to the assumption of time- and age-invariant M. It is plausible that Atlantic mackerel are in a depleted state owing to unknown ecosystem causes leading to high uncertainty in the OFL specification. Uncertainty in specifying time stanzas for stock projections and BRPs also point to high uncertainty in ecosystem

processes that have led to the recent period characterized by age-truncation, spawning ground contractions, and changed contingent composition.

The ASAP model and its inclusion of a stock-wide SSB index represented a remarkable advance in Atlantic mackerel assessment. In SAW 64, the ASAP model performance was compared with two alternative age-based models. The model is supported by expected cohort progressions and both the benchmark and MT assessments met peer review standards. In the MT assessment, moderate retrospective patterns occurred with some anomalous patterns in retrospective peels. Bridge runs showed overall consistency between the benchmark and MT assessments, albeit a large revision in MRIP estimates caused an increase in F since 2010.

In recent years, recreational catch comprised 35% of total US harvests, which translates to a greater contribution of error in MRIP estimates to total catch uncertainty. A missing component of catch — Canadian bait, recreational fisheries and discards — likely affects overall assessment accuracy, stock projections, and the effectiveness of stock rebuilding strategies (van Beveren et al. 2020).

A key uncertainty centers on what period of the stock's historical trajectory is relevant to stock projections and BRP determinations. Based upon the benchmark assessment, recent recruitments (inclusive of the strong 2015 year-class) were projected to achieve rebuilding targets by 2023. Projections from the MT assessment indicated much slower stock rebuilding over this period, calling attention to whether expectations for stock trends and/or rebuilding should be drawn from historical (1975-2019 or 1999-2019) or recent (2009-2019) recruitment time series.

## References

- Arai, K., Castonguay, M., Secor, D.H., 2021. Multi-decadal trends in contingent mixing of Atlantic mackerel (*Scomber scombrus*) in the Northwest Atlantic from otolith stable isotopes. Scientific Reports, 11(1).
- DFO. 2017. Assessment of the Atlantic Mackerel Stock for the Northwest Atlantic (Subareas 3 and 4) in 2016. DFO Can. Sci. Advis. Sec. Sci. Advis. Rep. 2017/034.
- Deroba, J.J., Schueller, A.M., 2013. Performance of stock assessments with misspecified age- and time-varying natural mortality. Fisheries Research, 146: 27-40.
- Hsieh, C. H., C. S. Reiss, J. R. Hunter, J. R. Beddington, R. M. May, G. Sugihara. 2006. Fishing elevates variability in the abundance of exploited species. Nature 443(7113):859-862.
- McManus, M.C., Hare, J.A., Richardson, D.E., Collie, J.S., 2018. Tracking shifts in Atlantic mackerel (*Scomber scombrus*) larval habitat suitability on the Northeast US Continental Shelf. Fisheries Oceanography, 27(1): 49-62.
- Overholtz, W.J., Waring, G.T. 1991. Diet composition of pilot whales *Globicephala* sp. and common dolphins *Delphinus delphis* in the Mid-Atlantic Bight during spring 1989. Fisheries Bulletin US. 89:723-728.
- Plourde, S. et al., 2015. Effect of environmental variability on body condition and recruitment success of Atlantic Mackerel (*Scomber scombrus* L.) in the Gulf of St. Lawrence. Fisheries Oceanography, 24(4): 347-363.



- Richardson, D.E., Carter, L., Curti, K.L., Marancik, K.E., Castonguay, M., 2020. Changes in the spawning distribution and biomass of Atlantic mackerel (*Scomber scombrus*) in the western Atlantic Ocean over 4 decades. *Fishery Bulletin*, 118(2): 120-134.
- Secor, D.H., Rooker, J.R., Gahagan, B.I., Siskey, M.R., Wingate, R.W., 2015. Depressed resilience of bluefin tuna in the Western Atlantic and age truncation. *Conservation Biology*, 29(2): 400-408.
- Van Beveren, E., Duplisea, D.E., Marentette, J.R., Smith, A., Castonguay, M., 2020. An example of how catch uncertainty hinders effective stock management and rebuilding. *Fisheries Research*, 224.

## Attachment 5

List of Acronyms used in this report.

<i>Acronym</i>	<i>Definition</i>
ABC	Acceptable Biological Catch
AOP	Assessment Oversight Panel
AP	Advisory Panel
ASAP	A Stock Assessment Program
BACI	Before-After Control-Impact
Bmsy	Biomass level at MSY
BRP	Biological Reference Point
CCAM	Censored Catch Assessment Model
CV	Coefficient of Variation
DFO	Department of Fisheries and Oceans
EAFM	Ecosystem Approach to Fisheries Management
Fmsy	Fishing Mortality rates at MSY
FSV	Fishery Survey Vessel
GARFO	Greater Atlantic Regional Fisheries Office
GRA	Gear Restriction Areas
MAFMC	MidAtlantic Fishery Management Council
MRIP	Marine Recreational Information Program
MSA	Magnuson-Stevens Fishery Conservation and Management Act
MSE	Management Strategy Evaluation
MSY	Maximum Sustainable Yield
MT	Management Track
MTA	Management Track Assessment
NEFSC	Northeast Fisheries Science Center
NMFS	National Marine Fisheries Service
NRCC	Northeast Region Coordinating Council
OFL	Overfishing Limit
PRC	Peer Review Committee
PSE	Proportional Standard Error
RHL	Recreational Harvest Limit
ROSA	Responsible Offshore Science Alliance
RSA	Research Set Aside
RTA	Research Track Assessment
RV	Research Vessel
SAM	State Space Assessment Model
SARC	Stock Assessment Review Committee
SAW	Stock Assessment Workshop
SSB	Spawning Stock Biomass
SSC	Scientific and Statistical Committee
TAL	Total Allowable Landings
TOR	Terms of Reference



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

## MEMORANDUM

**Date:** September 24, 2021  
**To:** Council  
**From:** Chris Moore  
**Subject:** Executive Director's Report

The following materials are enclosed for review during the Executive Director's Report at the October 2021 Council Meeting:

1. 2021 Planned Council Topics
2. Staff Memo: Update on the Thread Herring Exempted Fishing Permit
3. Staff Memo: Offshore Wind Updates
4. American Clean Power response to MAFMC letter to offshore wind developers (9/15/21)
5. National Marine Fisheries Service Budget Structure and Allocation Review (full report available [here](#))
6. CCC Letter to NMFS regarding Policy Directive 01-117 on the integration of Endangered Species Act (ESA) Section 7 with the MSA Processes (7/29/21)
7. NMFS response to the CCC letter on Policy Directive 01-117 (9/14/21)
8. Letter from GARFO to Sea Watch International regarding EFP request (9/9/21)
9. MAFMC letter to SERO regarding for-hire eVTR requirements (7/1/21)
10. SERO response to MAFMC and NEFMC eVTR letters (7/29/21)



# 2021 Planned Council Meeting Topics

Updated 9/21/21

## October 5-6, 2021 Council Meeting (Webinar)

- 2022 Implementation Plan: Discuss Draft Deliverables (Executive Committee)
- HMS Diet Study Final Report: Review
- Chub Mackerel 2022 Specifications: Review
- Thread herring exempted fishing permit discussion
- 2022 Spiny Dogfish Specifications: Review
  - Spiny Dogfish Trip Limit Analyses: Review and Recommend Changes if Appropriate
- Private Tilefish Permitting/Reporting Evaluation
- ~~Surflam and Ocean Quahog Species Separation Requirements: Review White Paper and Identify Next Steps-(moved to December)~~
- Atlantic Mackerel Rebuilding: Discuss and provide guidance as appropriate
- North Atlantic Right Whales: Review and comment on scoping materials

## December 13-16, 2021 Council Meeting (Annapolis, MD)

- 2022 Implementation Plan: Approve
- Recreational Reform Initiative: Update (Joint with Policy Board)
- Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment: Final Action (Joint with SFSBSB Board)
- Summer Flounder, Scup, and Black Sea Bass 2022 Recreational Management Measures: Approve (Joint with SFSBSB Board)
- Bluefish 2022 Recreational Management Measures: Approve (Joint with Bluefish Board)
- Biennial Review of 2020-2024 Research Priorities Document: Review and Approve
- EAFM Summer Flounder Management Strategy Evaluation: Update and Feedback (Joint with SFSBSB Board)
- ~~RSA Workshop Report: Review-(Final workshop postponed until February 2022 due to COVID)~~
- Habitat Activities Update (including wind and aquaculture)
- Ocean City, MD Video Project: Review Preliminary Results (Recording and analysis will continue into early 2022)
- Aquaculture Policy Document and Aquaculture in the Mid-Atlantic Region Background Document: Review and Approve
- Climate Change Scenario Planning: Update
- Surflam and Ocean Quahog Species Separation Requirements: Review White Paper and Identify Next Steps
- Sea turtle bycatch issue update



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Christopher M. Moore, Ph.D., Executive Director

# MEMORANDUM

**Date:** September 22, 2021  
**To:** Chris Moore, Executive Director  
**From:** Brandon Muffley and Julia Beaty, staff  
**Subject:** Update on the Thread Herring exempted fishing permit

In June 2021, the Council discussed an exempted fishing permit (EFP) application submitted to the Greater Atlantic Regional Fisheries Office (GARFO) for an experimental purse seine fishery in federal waters for Atlantic thread herring. Thread herring are an ecosystem component species under the Council's Unmanaged Forage Omnibus Amendment and are subject to a 1,700 pound possession limit. The application requested the ability to catch up to 3,000 MT (6.6 million pounds) of thread herring in 2022 and would require an exemption to the Unmanaged Forage possession limit.

The Council requested the SSC review the application and provide input on scientific and biological considerations of the application and proposed data collection program. Given the role of thread herring as forage in the ecosystem and application to the Unmanaged Forage Amendment, the Council also requested the Ecosystem and Ocean Planning (EOP) Committee meet to review the feedback from the SSC and provide any additional recommendations regarding the application.

The SSC discussed the thread herring EFP application at their September 7–8, 2021 meeting and their comments and recommendations are provided in the September SSC meeting report behind the Committee Reports tab. The EOP Committee is scheduled to meet on Monday, October 4<sup>th</sup> to discuss the EFP application (meeting information can be found at: <https://www.mafmc.org/council-events/2021/ecosystem-and-ocean-planning-committee-meeting>). A draft report or verbal summary of the Committee meeting will be provided to the Council at the October meeting.

The applicant may decide to revise and resubmit their EFP application to GARFO after considering the advice of the SSC and EOP Committee. Once GARFO publishes a Federal Register Notice with an associated public comment period, the Council may decide to submit a comment letter based on the SSC and EOP Committee recommendations. Staff will continue to keep the Council informed about the application and future Federal Register publication.



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Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

# MEMORANDUM

**Date:** September 24, 2021  
**To:** Chris Moore, Executive Director  
**From:** Julia Beaty, staff  
**Subject:** Offshore Wind Energy Updates

Since the last Council meeting in August 2021, the following developments related to offshore wind energy permitting and Council involvement have occurred:

- The Bureau of Ocean Energy Management (BOEM) published the Final Environmental Impact Statement for the South Fork Wind project, in the Massachusetts/Rhode Island Wind Energy Area and supplying power to New York. A Record of Decision regarding approval of the project is expected in the coming months.
- In August, BOEM and the Department of Energy (DOE) conducted informational meetings with fishing industry representatives and Council staff on regional coordination of offshore wind energy transmission. BOEM and DOE plan to continue dialog on this issue, but next steps have not yet been announced.
- BOEM held two comment periods related to planned wind energy leases in the New York Bight (see Council comment letters dated 8/13/21 and 9/20/21, below). BOEM may publish a final sale notice for these new leases later this year. Lease sales would occur following the publication of the final sale notice. The final notice will include lease stipulations, some of which may be relevant for fisheries. For example, BOEM may consider prescribed layouts and transit corridors as potential conditions of these leases.
- The Mid-Atlantic Council submitted the following comment letters to BOEM:
  - [MAFMC and NEFMC Letter to BOEM: New York Bight Proposed Sale Notice \(8/13/21\)](#)
  - [MAFMC Letter to BOEM: Notice of Intent to Prepare an EIS for the Kitty Hawk Wind Project \(8/30/21\)](#)
  - [MAMFC and NEFMC Letter to BOEM: Commercial and Research Wind Lease and Grant Issuance and Site Assessment Activities on the Atlantic Outer Continental Shelf of the New York Bight – Draft Environmental Assessment \(9/20/21\)](#)

- MAFMC Letter to BOEM: Notice of Intent to Prepare an EIS for the Sunrise Wind Project (in development, to be submitted 10/4/21)
- In July 2021, the Mid-Atlantic Council sent a letter to the developers of seven Mid-Atlantic offshore wind energy projects requesting suspension of survey work using sub-bottom profilers during September 15 - November 15, 2021 due to concerns about impacts on recreational fisheries. This letter can be found [here](#). On September 15, American Clean Power sent a letter on behalf of their members, including offshore wind project developers, stating that they could not accommodate this request. The letter is provided behind this tab.
- The SSC discussed offshore wind energy development during their September 2021 meeting. A summary of their discussion is provided behind the [Committee Reports tab](#).
- In 2018, the New England Council adopted the same [policy on wind energy](#) as the Mid-Atlantic Council. The New England Council is considering updating this policy to reflect lessons learned over the past few years. Mid-Atlantic Council staff are coordinating with New England Council staff on this effort. The New England Council may consider approving a revised wind energy policy in December 2021. The Mid-Atlantic Council may wish to consider making similar updates. More details on the recommended changes can be provided at a future Council meeting.
- It is anticipated that by the end of 2021, BOEM will publish notices of intent to prepare environmental impact statements for two more wind energy projects: Atlantic Shores off New Jersey and Mayflower Wind off Massachusetts/Rhode Island. The Council will likely write joint comment letters with the New England Council for these projects.
- Council staff continue to work with New England Council staff to maintain a website with updates on offshore wind energy development and to write joint comment letters for all relevant comment periods (see <https://www.mafmc.org/northeast-offshore-wind>).
- A more detailed update on offshore wind energy development, including a presentation by BOEM, is planned for the December Council meeting.



Christopher M. Moore, Ph.D.  
Executive Director  
Mid-Atlantic Fishery Management Council  
800 North State Street, Suite 201  
Dover, DE 19901

September 15, 2021

Dear Dr. Moore:

American Clean Power (ACP), on behalf of our members, is providing this response to your letter dated July 15, 2021. ACP is a national renewable energy trade association that represents offshore wind developers and manufacturers in addition to solar, onshore wind, storage, and transmission companies. ACP and its offshore wind members have established a joint-developer Fisheries Working Group to coordinate and collaborate on activities and share information related to fishing and fisheries engagements across the U.S. Atlantic Outer Continental Shelf. We appreciate this letter from the Mid-Atlantic Fishery Management Council (the Council) and welcome further communication and future coordination between ACP, our members, and the Council and your members.

In your letter dated July 15, 2021, the Council requested that all offshore wind developers suspend the use of sub-bottom profilers during the period from September 15 through November 15, 2021 in order to avoid potential impacts to the recreational fishery for black sea bass (*Centropristis striata*).

ACP and the Mid-Atlantic leaseholders appreciate the Council reaching out on this concern. ACP, along with the offshore wind developers, are committed to successful co-existence with commercial and recreational marine fisheries and our industry is actively engaged in communication and coordination with regional and local fisheries. We appreciate your time considering this response and would further appreciate a discussion on how we can facilitate coordination and communication of 2022 survey activities with the Council in the coming weeks.

Given regulatory requirements of conducting sub-bottom profiling during the specified period, already-completed government pre-site evaluations, and research across multiple industries demonstrating the impacts by geophysical surveys to be minimal and temporary, we are unable to accommodate your request at this time. However, we welcome the opportunity to continue to collaborate with the fishing community and the Councils via one-on-one, project-specific interactions and through the regulatory process, and science entities such as Responsible Offshore Science Alliance (ROSA).





## **Regulatory Requirements, Site Characterization, and Geophysical Survey Impact Research across Industries**

Geophysical surveys are essential activities necessary to support the responsible planning, development, and construction of critical infrastructure in the offshore environment, including offshore wind. These surveys are regularly conducted by many marine industries, federal and state government agencies, research/academic institutions, and the nation's military. The surveys are critical for understanding and characterizing the seafloor and subsurface, benthic habitats, identifying sand-sediment resources, and supporting a number of other activities in the U.S. Exclusive Economic Zone.

Geophysical surveys are required components of Site Assessment Plans and are regulated by the Bureau of Ocean Energy Management (BOEM) pursuant to 30 CFR Part 585, and through the attendant [regulatory guidelines<sup>\[1\]</sup>](#). Wind developers are required by BOEM to extensively characterize offshore wind lease areas and associated potential project areas, including export cable corridors outside of the lease areas. Due to this regulatory requirement and the required data to support agencies' review of projects, including Essential Fish Habitat consultation, developers must survey over multiple seasons to conform to the regulatory-driven data requirements. These surveys are planned, contracted, and permitted many months to a year in advance of actual activities. The operational timing considers protected species migration patterns, workable weather periods and fishing activities in order to conduct such activities safely and responsibly. Beyond site characterization, developers will be required to continue geophysical surveys to maintain and monitor the integrity of offshore installations during the construction, operations, and decommissioning cycles of the projects.

Governments, marine sectors (energy, maritime, technology), and academic institutions have extensively studied potential impacts to fish species from uses of all types of geophysical equipment, including sub-bottom profilers. Specific to the different types of geophysical equipment used in these surveys (including sub-bottom profilers), there have been considerable research, monitoring, and assessments conducted by governments, the marine sectors (energy, maritime, technology), and academic institutions to study potential impacts to fish species from their operation in the near and offshore environment. While not specific to black sea bass, these efforts regularly conclude that impacts to individual fish are temporary and that there is no conclusive evidence of population effects to fish species. Monitoring during surveys has shown that the effects continue to be temporary and short-term with fish returning to locations and resuming their species-dependent activities with no damage to habitats from acoustic energies emitted by these sources<sup>[2]</sup>. In terms of effects of sub-bottom profiler frequencies and noise levels, there are currently no conclusive scientific data that these activities affect the feeding behavior of black sea bass.



## **Current Coordination and Collaboration between Individual Offshore Wind Projects and Fisheries**

Offshore wind developers have adopted extensive methods to establish close coordination and communication with the fishing industry during geophysical surveys. ACP appreciates the Council's current efforts to amplify these communications, including consolidating Notice to Mariners published by each project on the Council's website. The intent of these efforts is to minimize interactions with fishermen actively fishing and to avoid interactions with deployed gear and fishing vessels. These efforts include a variety of direct communication and outreach tools such as communication between Fisheries Liaison Officers or Fisheries Representatives with fishermen active in survey areas, joint dock port hours, scouting efforts to map fixed fishing gear in survey areas, releasing notifications (Local Notice to Mariners, newsletters, websites, or other tools to announce locations of vessels and information to contact vessels), and direct communications between survey vessels with fishing vessels to promote safety at sea. Efforts taken by developers also include coordination with individual fishing entities, fishing associations, Fisheries Management Councils, state working groups, and others.

Fisheries activities and potential interactions with offshore survey operations, and the need for coordination may vary significantly across lease areas. Close coordination between the fishing industry and offshore survey operators at the lease level may consist of multiple points of coordination and communication, ranging from Local Notices to Mariners to direct coordination with Fisheries Liaisons and bridge-to-bridge communication with survey vessels, as appropriate. Fisheries Liaisons are positioned to facilitate this type of coordination in advance of survey and fishing operations. These methods have been used to achieve the successful coordination of commercial and recreational fishing operations and survey operations, and we suggest they can be employed to achieve the successful coordination of survey operations and fishing activity in the black sea bass fishery at a lease level as well. We believe that a coordinated approach at the project level to manage interactions between survey operations and fisheries will result in a successful and more closely coordinated outcome than a regional time of year restriction. We remain committed to achieving the successful coordination of our regulated site assessment activities with the commercial and recreational fishing communities and look forward to working closely with the agencies and the Councils as we work to complete our required geophysical surveys.

## **Collaboration between Offshore Wind and Fisheries in the Regulatory Process**



We strongly support BOEM's coordination with the National Marine Fisheries Service and the U.S. Regional Fishery Management Councils to assess potential impacts of site characterization on current and future leases on fish and their habitats. In addition, our members are partners of the ROSA and supporting a number of other organizations to conduct scientific studies to further evaluate potential impacts of offshore wind activities on fish and their habitats. We also encourage the Mid-Atlantic Fishery Management Council consider collaborating with ROSA to identify opportunities for studies that could further our understanding for effects of offshore wind activities on fish and their habitats. ACP and our members are committed to understanding and minimizing impacts to fisheries, and our site characterization activities are subject to a robust regulatory review process. The Mid-Atlantic offshore wind developers are unable to accommodate the requested seasonal restriction on these previously approved, regulated survey activities. ACP and our members would be pleased to work closely with the Council if there are opportunities to further enhance coordination and communication regarding geophysical surveys conducted by our members. We appreciate your expressed interest in our site characterization activities and related concerns and would appreciate the opportunity to further discuss coordination for future survey activities. We look forward to a discussion on these topics and working to ensure that offshore wind and fisheries can coexist in the United States and transforming the U.S. power grid to a low-cost, reliable and renewable power system.

Sincerely,

A handwritten signature in black ink that reads "Claire Richer".

Claire Richer  
American Clean Power  
[cricher@cleanpower.org](mailto:cricher@cleanpower.org)  
507-421-3137

A handwritten signature in black ink that reads "Ruth Perry".

Ruth Perry, Shell Renewables & Energy Solutions  
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<sup>[1]</sup> UNITED STATES DEPARTMENT OF THE INTERIOR Bureau of Ocean Energy Management Office of Renewable Energy Programs May 27, 2020 Guidelines for Providing Geophysical, Geotechnical, and Geohazard Information Pursuant to 30 CFR Part 585

<sup>[2]</sup> Agency Regulatory Requirements: <https://www.boem.gov/sites/default/files/documents/about-boem/COP%20Guidelines.pdf>; <https://www.boem.gov/sites/default/files/documents/about-boem/GandG%20Guidelines.pdf>; <https://www.boem.gov/sites/default/files/uploadedFiles/BOEM-Fishing%20FAQs.pdf>; and <https://www.boem.gov/sites/default/files/renewable-energy-program/Regulatory-Information/BOEM-Renewable-Benthic-Habitat-Guidelines.pdf>  
Scientific Publications & Reports: <https://espis.boem.gov/final%20reports/5361.pdf>; <https://www.sciencedirect.com/science/article/abs/pii/S0141113618300904>; [https://www.researchgate.net/profile/Rachel-Przeslawski/publication/325289437\\_Quantifying\\_fish\\_behaviour\\_and\\_commercial\\_catch\\_rates\\_in\\_relation\\_to\\_a\\_marine\\_seismic\\_survey/links/5b0e510aaca2725783f20715/Quantifying-fish-behaviour-and-commercial-catch-rates-in-relation-to-a-marine-seismic-survey.pdf](https://www.researchgate.net/profile/Rachel-Przeslawski/publication/325289437_Quantifying_fish_behaviour_and_commercial_catch_rates_in_relation_to_a_marine_seismic_survey/links/5b0e510aaca2725783f20715/Quantifying-fish-behaviour-and-commercial-catch-rates-in-relation-to-a-marine-seismic-survey.pdf); <https://tos.org/oceanography/article/introduction-to-the-special-issue-on-understanding-the-effects-of-offshore-wind-development-on-fisheries>; <https://dosits.org/animals/effects-of-sound/anthropogenic-sources/wind-turbine/>; <https://www.pnas.org/content/118/30/e2100869118>; <https://waves-vagues.dfo-mpo.gc.ca/Library/283727.pdf>; <https://www.nsf.gov/geo/oce/envcomp/usgs-nsf-marine-seismic-research/nsf-usgs-final-eis-oeis-with-appendices.pdf>

A Report by a Panel of the  
NATIONAL ACADEMY OF PUBLIC ADMINISTRATION  
for the National Marine Fisheries Service

# National Marine Fisheries Service Budget Structure and Allocation Review



July 2021

The full report is available online:

[National Marine Fisheries Service Budget Structure  
and Allocation Review Report](#)



**Caribbean**

Miguel Rolon  
Executive Director  
Marcos Hanke  
Chair



**Gulf of Mexico**

Dr. Carrie Simmons  
Executive Director  
Dr. Thomas Frazer  
Chair



**Mid Atlantic**

Dr. Christopher Moore  
Executive Director  
Mike Luisi  
Chair



**New England**

Thomas Nies  
Executive Director  
Dr. John Quinn  
Chair



**North Pacific**

David Witherell  
Executive Director  
Simon Kinneen  
Chair



**Pacific**

Chuck Tracy  
Executive Director  
Marc Gorelnik  
Chair



**South Atlantic**

John Carmichael  
Executive Director  
Melvin Bell  
Chair



**Western Pacific**

Kitty Simonds  
Executive Director  
Taotasi Archie Soliai  
Chair

July 29, 2021

Mr. Samuel D. Rauch III  
Deputy Assistant Administrator for Regulatory Programs  
NOAA Fisheries Directorate  
1315 East-West Highway, 14th Floor  
Silver Spring, MD 20910

Dear Sam:

The Council Coordination Committee (CCC) at its May 2021 meeting, discussed the implementation status of Policy Directive 01-117 on the Integration of Endangered Species Act (ESA) Section 7 with the Magnuson-Stevens Fishery Conservation and Management Act (MSA) Processes (ESA Policy Directive).

For most of the Councils that have used the ESA Policy Directive, lack of communication and coordination on ESA consultations from National Marine Fisheries Service (NMFS) remains the primary issue, and Councils are typically not provided advanced review of Reasonable and Prudent Measures (RPMs) or Reasonable and Prudent Alternatives (RPAs) to provide input on their development before a draft or final Biological Opinion (BiOp) is available to the public. The ESA Policy Directive included a number of discretionary provisions for NMFS, which have effectively limited the Councils' involvement in the consultations, contrary to the intent of the Policy Directive. Although not necessarily aligned with the Policy Directive provisions, the Pacific Fishery Management Council (Pacific Council) has had a more cooperative response from NMFS, with the West Coast Regional Office typically initiating the request for Council's assistance, and utilizing the Council process to develop measures to address ESA issues in advance of or concurrent with ongoing consultations.

Based on these experiences, the CCC requested strengthening the relationship between NMFS and Councils on Endangered Species Act consultations for fisheries by:

- Updating the ESA Policy Directive to improve the process and timing for Council involvement in ESA consultations;
- Requiring more direct communication from Protected Resources Division to the Councils early in the process to ensure effective and meaningful Council involvement;
- Providing draft BiOps and draft RPMs/RPAs to Council staff for input in advance of these drafts being made available to the public; and
- Developing a process for NMFS to work with the Council on ESA issues through the normal Council process rather than through RPMs and RPAs resulting from consultations.

The CCC also requests NMFS coordinate with Council staff from each region for the interagency working group on ESA consultations for fisheries.

The CCC would like to work with you and your staff to identify the best way forward to strengthen our relationship and update the ESA Policy Directive. The Western Pacific Council will be the lead Council on this matter. Please provide a point of contact from your office so we may initiate this effort.

Sincerely,



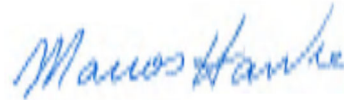
Pacific Fishery Management Council



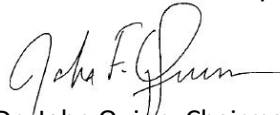
Mike Luisi, Chair  
Mid-Atlantic Fishery Management Council



Taotasi Archie Soliai, Chair  
Western Pacific Fishery Management Council



Marcos Hanke, Chair  
Caribbean Fishery Management Council



Dr. John Quinn, Chairman  
New England Fishery Management Council



Melvin Bell, Chair  
South Atlantic Fishery Management Council



Simon Kinneen, Chair  
North Pacific Fishery Management Council



Dr. Thomas Frazer, Chair  
Gulf of Mexico Fishery Management Council

cc: Regional Fishery Management Council Executive Directors





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
NATIONAL MARINE FISHERIES SERVICE  
Silver Spring, MD 20910

September 14, 2021

Dear Council EDs,

Thank you for your July 29, 2021 letter regarding the implementation of Policy Directive 01-117, Integration of Endangered Species Act (ESA) Section 7 with the Magnuson-Stevens Fishery Conservation and Management Act (MSA) Processes (the Policy Directive).

I am committed to working closely with the Fishery Management Councils to enhance our working relationship and improve communication where needed. As such, I have directed the Office of Sustainable Fisheries and the Office of Protected Resources to work with NOAA Fisheries regional staff to identify opportunities to improve existing processes for conducting ESA section 7 consultations on fishery management actions; part of their work will be to review the Policy Directive. I will take the contents of your letter into account when I review their recommendations.

However, I do want to address one suggestion at the outset which was to provide draft Biological Opinions “to Council staff for input in advance of these drafts being made available to the public.” As you are aware, our current policy recognizes the unique interest that the Councils have in an ESA consultation on an MSA action. It also allows for the sharing of draft Biological Opinions with the Councils in certain situations. But it recognizes that such draft documents shared with the Council are public documents. After consulting with our General Counsel, there is no difference between sharing the document with the full Council and sharing the document with selected Council staff. In either instance, the document would be a publically available document and producible under the Freedom of Information Act. Accordingly, we cannot provide Council staff an advance draft of a draft Biological Opinion prior to those drafts being made available to the public.

I appreciate your commitment to work with me to identify the best way forward, and am happy to consider any specific ideas for improvements in the ESA section 7 process that you have.

Sincerely,

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Date: 2021.09.14 11:12:12 -04'00'

Samuel D. Rauch, III  
Deputy Assistant Administrator for Regulatory Programs  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service

CC: Kelly Denit, Kimberly Damon-Randall, Adam Issenberg





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
GREATER ATLANTIC REGIONAL FISHERIES OFFICE  
55 Great Republic Drive  
Gloucester, MA 01930

September 9, 2021

Guy B. Simmons  
Senior Vice President  
Sea Watch International  
8978 Glebe Park Drive  
Easton, MD 21601

Dear Mr. Simmons:

As you are aware, we published a *Federal Register* notice soliciting public comments on your application for an exempted fishing permit (EFP) to conduct at-sea paralytic shellfish poisoning (PSP) testing in the Closed Area II scallop access area. After a review of the project proposal and the comments submitted from the New England Fishery Management Council, several issues must be addressed before proceeding with the EFP request at this time.

In the initial proposal and in conversation with my staff, you indicated that the purpose of this project was to conduct at-sea PSP testing in the Closed Area II scallop access area to explore potential expansion of the fishable area for at-sea certified testing vessels. The project proposal estimated a total of 416 trips for four surfclam vessels would be needed for the duration of the project. We are unclear why this requested level of effort is necessary to determine whether clams are free of PSP and safe for consumption. This level of effort is significantly higher than the amount of effort that is occurring annually in the open portion of Georges Bank (approximately 160 trips). In 2008, before the open area of Georges Bank was approved, we issued an EFP for a single vessel with a harvest of 176,000 bu of surfclams and 80,000 bu of ocean quahogs to determine if at-sea PSP testing was feasible in that area. This equates to approximately 60 full trips (32 bu per cage, 134 cages per trip). A level of effort aligned with the original EFP that was issued to open the area of Georges Bank would be more appropriate to address the stated purpose of the project.

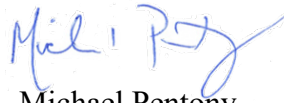
Additionally, there are other modifications to the project proposal that will ensure the project gathers data and information that would be useful when, and if, we consider the potential for expansion into Closed Area II. The New England Council expressed concerns with potential impacts of this project on scallops and groundfish species. The scallop access area in Closed Area II is set up as a rotational access area to minimize impacts on scallop beds and to ensure that younger scallops can grow to maturity. We recommend that any closed area access for surfclam vessels should correspond to the rotational access area(s) and schedule of the scallop fishery. Additionally, there is a closure of the scallop access area from August 15, 2021, through November 30, 2021, to protect spawning flatfish. We also suggest observer coverage for 5-10 percent of the proposed EFP trips to document species composition of the catch and bycatch from the clam dredge, in addition to the degree to which surfclams in the area test positive for



PSP. This coverage would help ensure the reliability of bycatch information on these trips and could be used when evaluating the potential for continued access to the area. This recommendation would represent observer coverage outside of the Northeast Fisheries Observer Program that the project would need to secure.

In order to move forward with your EFP request, please submitted a revised application that considers these suggestions. Please contact Laura Hansen ([Laura.Hansen@noaa.gov](mailto:Laura.Hansen@noaa.gov)) if you have any questions or would like to discuss the additional information we need to complete consideration of the EFP application.

Sincerely,



Michael Pentony  
Regional Administrator

Cc: Thomas Nies, NEFMC Executive Director  
Christopher Moore, MAFMC Executive Director



## Mid-Atlantic Fishery Management Council

800 North State Street, Suite 201, Dover, DE 19901

Phone: 302-674-2331 | FAX: 302-674-5399 | [www.mafmc.org](http://www.mafmc.org)

Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman

Christopher M. Moore, Ph.D., Executive Director

July 1, 2021

Andy Strelcheck  
Acting Regional Administrator  
Southeast Regional Office  
National Marine Fisheries Service  
263 13th Avenue South  
St. Petersburg, FL 33701-5505

Dear Andy:

The Mid-Atlantic Council is concerned about the new reporting requirements related to the South Atlantic Fishery Management Council's (SAFMC) 2017 For-hire Reporting Amendment that were implemented by SERO beginning January 4, 2021. As you know, these new reporting requirements impacted not only SERO for-hire permit holders but also GARFO for-hire permit holders who were already required to report electronically. Although a single report via eTrips mobile can accommodate the requirements for each region, four additional reporting fields are required under the SERO permits including socioeconomic questions related to trip fees, fuel usage, and prices.

Mid-Atlantic Council members and stakeholders are concerned that the addition of these questions increases reporting burden and possibility of inaccurate data. For example, a captain who does not easily know the amount of fuel used or the price of fuel may file an inaccurate report to meet their reporting deadline. In addition, the lack of clarity regarding the utility of these questions as well as the lack of stakeholder support is undermining the support for electronic data collection and our relationship with these constituents.

According to the [Final Rule](#), economic data are being collected from charter vessels to enhance the ability of the South Atlantic Council and NMFS to estimate the economic impacts and values specific to charter vessels and support research efforts aimed at increasing net benefits to these stakeholders as well as the U.S. economy. Instead of a regulatory requirement, an alternative might be to make the answers to these questions voluntary combined with increased outreach to indicate their importance and promote participation. Completeness and accuracy of data are the foundations for gathering quality data and the Mid-Atlantic Council is concerned that these few additional fields will not only result in dubious information for those data elements but jeopardize the quality of the other data as well.

Please contact me if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "C Moore".

Christopher M. Moore, Ph.D.  
Executive Director

Cc: M. Luisi, P. Townsend, J. Carmichael, T. Nies, K. Coutre



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
**NATIONAL MARINE FISHERIES SERVICE**  
Southeast Regional Office  
263 13<sup>th</sup> Avenue South  
St. Petersburg, Florida 33701-5505  
<https://www.fisheries.noaa.gov/region/southeast>

07/29/2021

Christopher M. Moore, Ph.D  
Mid-Atlantic Fishery Management Council  
800 North State Street, Suite 201  
Dover, DE 19901

Thomas A. Nies  
New England Fishery Management Council  
50 Water Street  
Newburyport, MA 01950

Dear Chris and Thomas,

Thank you for your letters regarding the reporting requirements for the Southeast For-Hire Integrated Electronic Reporting Program (For-Hire Reporting Program). I appreciate the feedback on the additional southeast permit-specific data elements that were incorporated into the Atlantic Coastal Cooperative Statistic Program's (ACCSP) eTrips electronic reporting application. The regulations implemented for permit holders in the charter vessel/headboat Atlantic dolphin wahoo fishery, Atlantic coastal migratory pelagic fishery, and South Atlantic snapper grouper fishery, are requirements of the permit that apply regardless of where the permit holder fishes.

Regarding your concern over the collection of socioeconomic data, the Magnuson-Stevens Fishery Conservation Act (MSA) and the National Environmental Policy Act (NEPA) require NOAA Fisheries to assess the social and economic impacts of management actions. Although some economic data has been comprehensively collected by NOAA Fisheries for the commercial sector (price and revenue) and for headboats (fuel cost), the economic data that was collected from charter vessels historically was episodic and often based on small sample sizes. Further, that economic data was often outdated when socioeconomic analyses were needed for management and regulatory actions. Through the For-Hire Reporting Program, the detailed economic data entered by fishermen in real time through the additional questions added to the eTrips application will enhance the ability of NOAA Fisheries and the fishery management councils to understand potential impacts of proposed management and regulatory change(s) on the for-hire sector (e.g., changing bag limits, area closures, etc.). These data will also allow us to better monitor the economic health of the industry over time. In addition, the economic information will help fishery managers and scientists assess the value of the for-hire sector that will allow for economic recovery in the event of a fishery disaster. Fisheries economists will use these data in their cost-benefit and economic impact analyses for actions and amendments that propose regulatory changes. These data will always be used in a confidential manner. The information can also be used to inform quota allocation decisions, fisheries research, and disaster recovery damage assessments.



During the development of the For-hire Reporting Amendment, the South Atlantic Fishery Management Council (South Atlantic Council) identified all of the data elements to be included and determined that the collection of economic information was essential to the For-Hire Reporting Program.

The NOAA Fisheries' Southeast Regional Office (SERO) and Greater Atlantic Regional Fisheries Office (GARFO) staff identified approximately 300 permit holders that have both GARFO and SERO permits. These permit holders would be required to submit electronic logbook reports to both GARFO and SERO. However, in an effort to reduce possible duplication, ease the reporting burden on permit holders, and create a one-stop reporting platform, staffs from SERO, GARFO, and NOAA Fisheries' Highly Migratory Species Division (HMS) worked with the ACCSP staff to modify an existing reporting application (eTrips) to recognize these multi-region permit holders.

The eTrips application is able to determine which questions the permit holder should see and answer, based on the existing reporting requirements for SERO, GARFO and HMS. If the permit holder has a SERO permit, the eTrips form will include the required four socio-economic questions: fuel price per gallon, amount of fuel used, charter fee, and number of paying passengers. These questions *only apply* when a person has a SERO vessel permit. GARFO permit holders who do not have a SERO permit would not see these additional four socio-economic questions. In addition, eTrips also includes additional data element questions related to HMS (e.g., fight time, estimated weight, hook size, etc.) when any of six HMS species are landed (bluefin tuna, blue marlin, white marlin, roundscale spearfish, sailfish, and swordfish).

The For-Hire Reporting Program is a new data collection process for NOAA Fisheries SERO, and we know that modifications to the program may be needed to fine-tune the program in the future. However, the South Atlantic Council will need to review and recommend any changes to the structure of the program, including changes to the data elements. At their September 2021 meeting, the South Atlantic Council will receive an update on the For-Hire Reporting Program and plans to discuss the concerns you have outlined in your letters.

Sincerely,

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Date: 2021.07.29 13:30:12 -0400'

Andrew J. Strelcheck  
Acting Regional Administrator



# SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

4055 Faber Place Drive, Suite 201, North Charleston SC 29405  
Call: (843) 571-4366 | Toll-Free: (866) SAFMC-10 | Fax: (843) 769-4520 | Connect: [www.safmc.net](http://www.safmc.net)

Melvin Bell, Chair | Stephen J. Poland, Vice Chair  
John Carmichael, Executive Director

## Revised SAFMC Meeting Agenda

September 13-17, 2021

### Via Webinar

Webinar registration: <https://register.gotowebinar.com/register/5582815786823771915>

Except for advertised (scheduled) public hearings and public comment sessions, the times indicated on the agenda may be adjusted as necessary to accommodate the completion of agenda items. Interested parties should be aware that meetings may start earlier or later than indicated.

Use the online comment form at: <https://safmc.wufoo.com/forms/mlf29u00s74vmy/> to submit comment on items on this agenda. Comments will be accepted from August 30 to September 17, 2021. These comments are accessible to the public, part of the Administrative Record of the meeting, and immediately available for Council consideration.

View submitted comments at: <https://safmc.wufoo.com/reports/2021-september-council-meeting-comment-report/>

### **Monday, September 13, 2021**

### **COUNCIL SESSION**

#### **COUNCIL SESSION I /Mel Bell 1:00 pm – 5:30 pm**

Call to order and introductions

Adopt agenda

Approve minutes

Oath for new Council members

1. Reports (state agencies, Council liaisons, NOAA OLE, USCG)
2. Acceptable Biological Catch (ABC) Control Rule
3. Allocations Decision Tool
4. Citizen Science Update
5. Outreach and Communications Update
6. Atlantic Large Whale Take Reduction Plan update (SERO Protected Resources)
7. Brief on Congressional directive to NMFS on shark and dolphin depredation issues in South Atlantic and Gulf of Mexico fisheries

### **Tuesday, September 14, 2021**

### **COMMITTEE MEETINGS**

#### **Snapper Grouper Committee/Jessica McCawley 8:30 am – 12 noon**

1. 2-for-1 permit evaluation
  - a. Overview
  - b. AP comments and recommendations
2. Greater Amberjack (SG Amendment 49)

- a. Overview
- b. AP comments and recommendations

**12:00 noon to 1:30 pm      Lunch**

**Snapper Grouper Committee/Jessica McCawley 1:30 pm – 5:30 pm**

- 3. Snowy Grouper (SG Amendment 51)
  - a. Overview
  - b. AP comments and recommendations
  - c. Approve for scoping
- 4. Yellowtail Snapper (SG Amendment 44)
  - a. Overview and approve for scoping
- 5. Red Snapper (short-term response)
  - a. SSC recommendations
  - b. Overview of options
- 6. Wreckfish (SG Amendment 48)
  - a. Options for possible restructuring and guidance to staff

**Wednesday, September 15, 2021**

**COMMITTEE MEETINGS**

**Snapper Grouper Committee/Jessica McCawley 8:30 am – 12:00 noon**

- 7. Red Pogy (SG Amendment 50)
  - a. Overview (public hearing during public comment session)
- 8. Gag
  - a. NMFS guidance on rebuilding options
- 9. Vermilion Snapper Trip Limit
- 10. Fall 2021 AP meeting topics
- 11. Red Snapper and Greater Amberjack Counts Update
- 12. Exempted Fishing Permit Brief

**12:00 noon to 1:30 pm      Lunch**

**Dolphin Wahoo Committee/Kerry Marhefka 1:30 pm – 3:45 pm**

- 1. Update on DW Amendment 10
- 2. Information paper for framework amendment

**Wednesday, September 15, 2021**

**PUBLIC COMMENTS**

**4:00 pm**

**Public comment will be accepted from individuals attending the meeting regarding any of the items on the Council agenda. The Council Chair, based on the number of individuals wishing to comment, will determine the amount of time provided to each commenter. To sign-up to give a verbal public comment during the public comment session, visit:**  
<https://safmc.wufoo.com/forms/mycp1xi1mwgbk/>



**Please use the online comment form to submit written comments:**

<https://safmc.wufoo.com/forms/mlf29u00s74vmy/>

**Exempted Fishing Permit (EFP) Request**

**Atlantic Large Whale Take Reduction Team (ALWTRT) Proposals**

**Approval for Scoping:**

- (1) Snowy Grouper (SG Amendment 51)
- (2) Yellowtail Snapper (SG Amendment 44)

**Approval for Public Hearings:**

- (1) King Mackerel (CMP Amendment 34)
- (2) Gulf Cobia (CMP Amendment 32)

**Public Hearings:**

- (1) Red Porgy (SG Amendment 50)

**Final Approval:**

- (1) Shrimp Fishery Access Area (Coral Amendment 10)

**Thursday, September 16, 2021**

**COMMITTEE MEETINGS**

**Mackerel Cobia Committee/Steve Poland 8:30 am – 12:00 noon**

- 1. King Mackerel (CMP Amendment 34)
  - a. Overview and approve for public hearings
- 2. Gulf Cobia (CMP Amendment 32)
  - a. Overview and approve for public hearings

**12:00 noon to 1:30 pm      Lunch**

**Habitat & Ecosystem Committee/Steve Poland 1:30 pm – 3:00 pm**

- 1. Shrimp Fishery Access Area (Coral Amendment 10)
  - a. Overview and final approval
- 2. Habitat Blueprint update
- 3. Fall 2021 AP meeting topics

**COUNCIL SESSION II/ Mel Bell 3:00 – 5:30**

**COUNCIL SESSION**

- 1. Council Chair and Vice Chair elections
- 2. Litigation brief (if needed)
- 3. Protected Resources
  - a. Integration agreement
  - b. Dolphin Wahoo Biological Opinion
  - c. Atlantic Large Whale Take Reduction Plan Discussion
  - d. Update on items not already covered

**COUNCIL SESSION II /Mel Bell 8:30 am – 12:00 noon**

4. Committee Reports
  - a. Snapper Grouper/Jessica McCawley
  - b. Dolphin Wahoo/Kerry Marhefka
  - c. Mackerel Cobia/Steve Poland
  - d. Habitat & Ecosystem/Steve Poland
  
5. Exempted Fishing Permit Discussion
  
6. FMP workplan review
  
7. Council staff reports
  - a. Executive Director
  - b. Climate Change Scenario Planning update
  
8. NMFS SEFSC reports
  - a. Commercial Electronic Logbook Update
  - b. Updates:
    - i. Southeast Region Climate Team and the Climate Regional Action Plans (RAPs) for the Gulf of Mexico and the South Atlantic
    - ii. US South Atlantic Ecosystem Status Report
    - iii. Fish Climate Vulnerability Assessment
    - iv. Atlantic Coast Science Coordination Workshop
  
9. NMFS SERO Reports
  - a. Southeast For-Hire Electronic Reporting Program update
  - b. For-Hire Electronic Reporting Program letters response
  
10. Other business
  
11. Upcoming meetings

Adjourn



## 9/17/21 News Release: Council Approves Expansion of Shrimp Fishery Access Area Adjacent to Deepwater Coral

It has been seven years since expansion of the northern end of the *Oculina* Bank Habitat Area of Particular Concern (HAPC) was approved by the South Atlantic Fishery Management Council. Designed to provide additional protection for the rare, slow growing, deepwater *Oculina* coral found off the central east coast of Florida, the expansion also included historic fishing grounds for the economically important rock shrimp fishery, shutting off access along the eastern boundary. The initial *Oculina* Coral HAPC, established in 1984, was the first deepwater coral protected area in the U. S., and its boundaries were developed in cooperation with the rock shrimp industry. Vessel Monitoring Systems have been in place since 2003 for the fishery. Following expansion of the Coral HAPC in 2014, the Council assured rock shrimp fishermen that the area would be reviewed to determine if the historic trawling areas could be reopened. During its quarterly meeting this week, members of the Council voted to approve Coral Amendment 10 to establish the rock shrimp fishery access area. The amendment must be approved by the Secretary of Commerce before the measures are implemented.

The decision to reopen the fishery access area, a narrow strip along the eastern edge of the Coral HAPC measuring approximately 22-square miles, was not without controversy. Over the years, the *Oculina* Bank has suffered extensive habitat damage due to mobile fishing gear (trawls and dredges) and anchoring. Council members considered recommendations from its advisory panels and received public comment both in support of and against the rock shrimp fishery access area.

Letters in support of the fishery access area included those from the Florida Fish and Wildlife Conservation Commission, fishing industry leaders, and a former Council member. Coral biologists, scientists, and environmental groups were among those who expressed concerns that reopening the trawling area could damage existing coral habitat, noting the negative impacts of sediment from trawling activities. "We've heard from both sides on this issue and sincerely appreciate all of the letters and public comment received," said Council Chair, Mel Bell. "After exploring options, including additional mapping and bottom surveys, we felt it important to move forward with this amendment." If approved by the Secretary, the new regulations would become effective in 2022.

### **Red Snapper**

Discussion of Red Snapper management continued to focus on the challenge of dealing with the increasing number of fish that are released throughout the year as the stock continues to rebuild, and the estimated number of released fish that don't survive. In June 2021, the Council received the results of the most recent stock assessment for Red Snapper, which indicated that the stock is not yet rebuilt and experiencing overfishing. According to the stock assessment, released fish account for 90% of the fishing mortality for Red Snapper in the South Atlantic.

After receiving a report from its Scientific and Statistical Committee at this week's meeting, the Council agreed to immediately look at actions to help reduce the number Red Snapper killed by

discarding. Measures to be considered include gear modifications (single hook rigs, larger hooks, leader modifications, natural bait prohibition), consideration of a slot limit, increased outreach on best fishing practices, and data collection through the Council's Citizen Science Project, *SAFMC Release*. The Council also requested a Research Track stock assessment be conducted for Red Snapper at the next available opportunity. Council members acknowledged the need to consider the multi-species snapper grouper fishery as a whole and will form a workgroup to lead a Management Strategy Evaluation (MSE) approach to reduce discards and increase landed yield across the entire snapper grouper fishery.

As required, the Council will also begin an amendment to the Snapper Grouper Fishery Management Plan to revise management parameters for Red Snapper based on the latest stock assessment and recommendations from its Scientific and Statistical Committee. The amendment will incorporate the results of the MSE project and consider additional actions for the snapper grouper fishery to address widespread fishery issues such as discard losses. The Council will receive input from its Snapper Grouper Advisory Panel and continue work during its December 2021 meeting.

### **Other Business:**

The Council accepted public hearing comment on proposed measures for Red Porgy during its meeting. Despite being under a rebuilding plan to rebuild the stock by 2017, recruitment continues to be low and the stock remains overfished and undergoing overfishing. Amendment 50 to the Snapper Grouper Fishery Management Plan would establish a new rebuilding plan based on the latest stock assessment and reduce harvest for both commercial and recreational sectors. Under the Council's preferred alternatives, the amendment would reduce commercial trip limits during the annual split season, reducing Season 1 (Jan-June) from 60 fish to 15 per trip and Season 2 (July-Dec) from 120 fish to 15 per trip. The current recreational bag limit of 3 fish per person per day or per trip, whichever is more restrictive, would be reduced to 1 fish. An annual recreational season of May-June would also be established for Red Porgy and recreational accountability measures modified to help ensure the new recreational catch limit is not exceeded.

There was good news for the King Mackerel fishery, with the latest stock assessment allowing an increase in catch levels. Coastal Migratory Pelagics Amendment 34 includes measures to increase the recreational bag limit for King Mackerel from 2 to 3 fish off East Florida and reductions in minimum size limits. Coastal Migratory Pelagics (King Mackerel, Spanish Mackerel and Cobia) are managed jointly with the Gulf of Mexico Fishery Management Council. The Council approved the amendment for public hearings on the proposed measures. The amendment will be reviewed by the Gulf Council in October where they will select preferred alternatives and consider approval for public hearings.

The Council also approved Coastal Migratory Pelagic Amendment 32 for public hearings. The amendment addresses measures for Cobia off the east coast of Florida as part of the Gulf of Mexico Cobia management group. The intent is to hold public hearings later this year with listening stations along the east coast of Florida from Key West to Jacksonville.

The Council re-elected Mel Bell as its Chair and Dr. Carolyn Belcher as the new Vice-Chair.

Additional information about this week's Council meeting, including the September [Council Meeting Story Map](#) and final committee reports is available from the Council's website at: <https://safmc.net/september-2021-council-meeting-details/>. The next meeting of the South

Atlantic Fishery Management Council is scheduled for December 6-10, 2021, in Beaufort, North Carolina.

**New England Fishery Management Council Meeting Agenda**  
**Tuesday – Thursday, September 28-30, 2021**  
[By Webinar](#)

Sending comments? Written comments must be received at the NEFMC office no later than 8:00 a.m., Thursday, September 23, 2021 to be considered at this meeting. Please address comments to Acting Council Chairman Eric Reid or Executive Director Tom Nies at: NEFMC, 50 Water St., Mill 2, Newburyport, MA 01950. Email submissions should be sent to [comments@nefmc.org](mailto:comments@nefmc.org).

**IMPORTANT:** Due to ongoing public safety considerations related to [COVID-19](#), this meeting will be conducted by webinar. Please continue to monitor the Council's [September 2021 meeting webpage](#) for updates.

**PUBLIC COMMENTS:** The Council's "Guidelines for Providing Public Comments" can be found [here](#). Anyone interested in speaking during the open period for public comment on September 30, 2021 at 1:30 p.m. should email Janice Plante at [jplante@nefmc.org](mailto:jplante@nefmc.org) to get on the list.

**Tuesday, September 28, 2021**

- 9:00 a.m. Introductions and Announcements** (Acting Chairman Eric Reid)
- 9:10 Swearing-in of New and Reappointed Council Members** (GARFO Regional Administrator Mike Pentony)
- 9:20 Election of 2021-2022 Officers**
- 9:40 Reports on Recent Activities**  
Council Acting Chairman, Council Executive Director, Greater Atlantic Regional Fisheries Office (GARFO) Regional Administrator, National Oceanic and Atmospheric Administration (NOAA) General Counsel, Northeast Fisheries Science Center (NEFSC), Mid-Atlantic Fishery Management Council (MAFMC), Atlantic States Marine Fisheries Commission (ASMFC), U.S. Coast Guard, NOAA Enforcement, Stellwagen Bank National Marine Sanctuary, NOAA Fisheries Highly Migratory Species Advisory Panel
- 11:30 Magnuson-Stevens Fishery Conservation and Management Act (MSA)** (Executive Director Tom Nies)  
Receive overview of H.R. 4690, "Sustaining America's Fisheries for the Future Act of 2021," a bill to reauthorize the MSA; Council discussion; approve Council comments
- 12:30 p.m. Lunch Break**
- 1:30 Atlantic Large Whale Take Reduction Plan (ALWTRP)** (Colleen Coogan, Marisa Trego, GARFO)  
GARFO presentation on: (1) ALWTRP Phase 1 final rule for Northeast lobster and Jonah crab trap/pot fisheries; and (2) ALWTRP Phase 2 scoping on potential measures for U.S. gillnet and other trap/pot fisheries to reduce entanglements of North Atlantic right whales, humpback whales, and fin whales with commercial fishing gear; Council discussion and input on scoping comments
- 3:00 Atlantic Herring Committee Report** (Rick Bellavance)  
Framework Adjustment 9: final action on (1) rebuilding plan to address the overfished status of Atlantic herring; and (2) adjustment of herring accountability measures
- 5:00 NS 1 Draft Tech Memo on Annual Catch Limits (ACLs) for Data-Limited Stocks** (Executive Director Tom Nies)  
Receive overview of National Marine Fisheries Service (NMFS) National Standard 1 Technical Guidance Memo on managing with ACLs for data-limited stocks in federal fishery management plans; approve Council comments

**Wednesday, September 29, 2021**

- 9:00 a.m. Northwest Atlantic Fisheries Organization (NAFO)** (Dr. Mike Sissenwine)  
Report on NAFO's 43<sup>rd</sup> annual meeting
- 9:15 SSC Social Science Subpanel Review of Recent Groundfish and Scallop Frameworks** (Dr. Lindsey Williams)

Presentation on Scientific and Statistical Committee's (SSC) Social Science Subpanel Review of socioeconomic information in Groundfish Framework Adjustment 59 and Scallop Framework Adjustment 32; Council discussion

- 10:00 Scallop Committee Report** (Melanie Griffin)  
Framework Adjustment 34: summary of 2021 scallop survey results and update on development of 2022 fishery specifications, 2023 default specs, and inclusion of Amendment 21 measures in Framework 34; Evaluation of Rotational Management Program: progress report; Scallop Survey Working Group: update
- 11:30 Transboundary Resources Assessment Committee (TRAC)** (Tara Trinko Lake)  
Receive TRAC summary of 2021 assessment results/updates for Eastern Georges Bank cod, Eastern Georges Bank haddock, and Georges Bank yellowtail flounder
- 12:00 p.m. Scientific and Statistical Committee (SSC) Report** (SSC Chair Dr. Jason McNamee)  
Receive SSC recommendations on overfishing limits (OFLs) and acceptable biological catches (ABCs) for Georges Bank yellowtail flounder for fishing years 2022 and 2023
- 12:15 Transboundary Management Guidance Committee (TMGC) Report** (Libby Etrie)  
Review and approve TMGC recommendations for 2022 total allowable catches (TACs) for shared U.S./Canada stocks on Georges Bank
- 12:30 Lunch Break**
- 1:30 Groundfish Committee Report** (Rick Bellavance)  
Framework Adjustment 63: progress report on action that includes (1) 2022 TACs for U.S./Canada shared resources on Georges Bank (GB), (2) 2022-2023 specifications for Georges Bank yellowtail flounder, (3) 2022-2024 specifications for Georges Bank cod and Gulf of Maine cod, (4) possible adjustment of 2022 specs for Georges Bank and Gulf of Maine haddock, (5) adjustment of 2022 specs for white hake based on rebuilding plan, (6) additional measures to promote stock rebuilding, and (7) alternatives for setting groundfish default specifications; Atlantic Cod Stock Structure Workshops: consider measures that can be adopted regardless of assessment outcomes
- 4:15 Skate Committee Report** (Libby Etrie)  
2022-2023 Specifications: receive SSC recommendations on overfishing limit and acceptable biological catch; Council final action
- 4:45 Northeast Trawl Advisory Panel (NTAP):** (Dr. Mike Sissenwine)  
Update on recent NTAP meetings; approve revised charter

**Thursday, September 30, 2021**

- 9:00 a.m. Ecosystem-Based Fishery Management (EBFM) Committee Report** (John Pappalardo)  
Committee update on: EBFM public information workshops; National Standard 1 issues related to potentially managing catches by stock complex rather than as individual stocks; and report on potential committee recommendation for example EBFM Management Strategy Evaluation exercise
- 10:00 Habitat Committee Report** (Eric Reid)  
Receive updates on: (1) recent Council comments to federal agencies on offshore wind projects and other issues; (2) upcoming comment opportunities; and (3) other habitat-related work
- 10:45 Monkfish Committee Report** (Libby Etrie)  
Report on committee discussion of analyses of discard estimation methods and potential next steps
- 11:15 Peer Review Report on June 2021 Management Track Stock Assessments** (Dr. Mark Terceiro, NEFSC)  
Northeast Fisheries Science Center presentation on peer review of June 2021 Management Track Stock Assessments for black sea bass, scup, Atlantic mackerel, and golden tilefish
- 11:45 Whiting Committee Report** (Rick Bellavance)  
Overview of committee discussion on 2020 Annual Monitoring Report and whether management adjustments are needed

**12:30 p.m. Lunch Break**

**1:30 Open Period for Public Comment**

Opportunity for the public to provide brief comments on issues relevant to Council business but not listed on this agenda (please limit remarks to 3-5 minutes)

**1:45 2022 Council Priorities – Initial Discussion (Executive Director Tom Nies)**

Initial discussion on 2022 Council Priorities for all fishery management plans and other Council responsibilities

**2:45 Other Business**

*Times listed next to the agenda items are estimates and are subject to change.*

*This meeting is being held entirely by webinar. Council member financial disclosure forms are available for examination on the Council website.*

Although other non-emergency issues not contained on this agenda may come before this Council for discussion, those issues may not be the subject of formal action during this meeting. Council action will be restricted to those issues specifically listed in this notice and any issues arising after publication of this notice that require emergency action under section 305 (c) of the Magnuson-Stevens Act, provided the public has been notified of the Council's intent to take final action to address the emergency.

**Documents pertaining to Council actions are available for review prior to a final vote by the Council.**

**Please check the Council's website, [www.nefmc.org](http://www.nefmc.org), or call (978) 465-0492 for copies.**

**This meeting will be recorded. Consistent with 16 USC 1852, a copy of the recording is available upon request.**